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JUNIOR ARTS & ACTIVITIES

CLASSROOM ACTIVITIES FOR THE ELEMENTARY TEACHER



UNITED NATIONS WEEK
SEPTEMBER 3-9

AUG 23 1946

VOLUME 20 • NUMBER 1

SEPTEMBER
1946

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ACTIVITIES IN WOOD (Page 25)—SCIENCE ACTIVITIES (Page 16)

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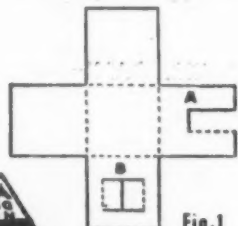
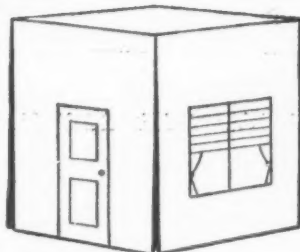


Fig. 1



Lay an old sheet, white tablecloth or a large piece of paper over a card table. Cover must be large enough to reach the floor on all sides. Mark each table corner on the sheet, then cut out a square of material from each corner, as in Figure 1. On one side draw a door with Crayola and cut along two sides, as in A. On another side draw a window, cutting across top and bottom and down the center, as in B. Fold along dotted lines. Sides of house can be taped, pinned or sewed together.

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THE LETTER BOX

This department is calculated to add to Junior Arts and Activities' usefulness to you. Each month we shall answer as many of your questions as possible in these columns. In addition, each question received will be answered by a personal letter.

To give you the benefit of the knowledge and opinions of more than one individual, we have planned that your questions will be answered by different individuals on our staff, including the editor of Junior Arts and Activities.

Address all questions to the Editor, Junior Arts and Activities, 4616 North Clark Street, Chicago 40, Illinois.

Dear Editor:

I wish to create some interest in arts and crafts in our community and I thought of showing some pictures of the different art work such as pottery, weaving, leather work, plastics, and so on. Can you give me information as to what films are good and also where to get them?

W.W., Kansas

The following organizations have material which you can use. All the materials we have listed are films, but the organizations may have filmstrips and slides. We suggest that you write them for further information.

Encyclopædia Britannica Films, Inc. (20 N. Wacker Dr., Chicago 6): "Metal Craft," "Pottery Making," "Arts and Crafts of Mexico."

Walter O. Gutlohn, Inc. (25 W. 45th St., New York 19): "Make a Mask," "Make a Plaster Figure," "Make a Hand Puppet," "Linoleum Block Printing," "Leather Tooling."

SERVICE FOR SUBSCRIBERS

September is a busy month for all elementary teachers. We know you want to start the year right and to have materials, projects, and activities on hand so that your class will not be delayed. You may have questions about integrations and correlations, sources of materials, suitable books for supplementary reading and reference, programs, and so on.

We suggest that you write us. We have established a separate department for finding the answers to teachers' questions.

It requires about a month to do the necessary research and send a reply to your letter. (Sometimes we surprise ourselves and our correspondents by beating this deadline!) We suggest that you write us early so that your letter will arrive before the rush begins.

Make all requests as specific as possible. State the grade or grades you teach; give us any additional information you believe will be helpful in preparing the material you wish.

Write to: The Editor

Junior ARTS & ACTIVITIES

4616 N. Clark St.

Chicago 40, Ill.

American Crayon Co. (Sandusky, Ohio): "Hands at Work," "Making a Mural," "Making a Stained Glass Window," "Water Colors."

Dear Editor:

Will you please send me a list of sources where I might obtain information about California Indians and California history and missions?

F.J., California

We believe that you will find ample material in the following references:

A Child's History of California by Enola Flower, published by The Caxton Printers, Ltd., Caldwell, Idaho, 1940. \$2.50.

"The Ancient Basketmakers," 25c; "The Navaho," 30c; "America's Indian Background," 20c. These three booklets published by The Southwest Museum, Highland Park, Los Angeles 42,

have excellent material.

Indian Picture Writings in Southern California by George Robert Momyer is very good. This booklet may be ordered from the author at 398 Sixth St., San Bernardino, California. 25c.

Write to your state department of education for their "A Study of the Pueblo Indians." This is one of their curriculum units for elementary schools. Also, I suggest that you write to your state historical society.

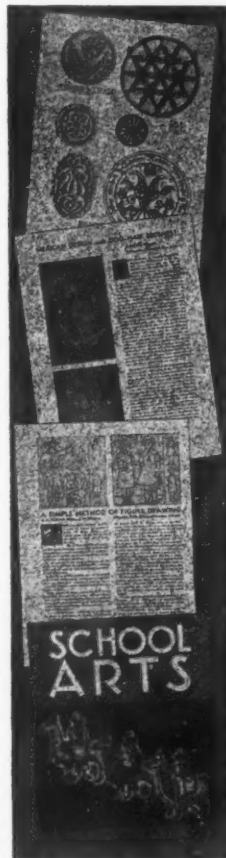
Note: There will be a unit on California Indians in the October 1946 issue of *Junior Arts and Activities*.

Dear Editor:

I am writing to inquire if you have anything suitable for kindergarten pupils. We are in a very remote area and I am most anxious to ob-

(Continued on page 2)

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Waiting for you is the September Mother Asia Art-crafts, a conducted art tour by Editors Pedro deLemos, Jane Rehnstand and Esther Morton. October has just what you'll like for Holiday helps—November, Creative Design and Decorations—The first three issues are outstanding!

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UNITED WORLD

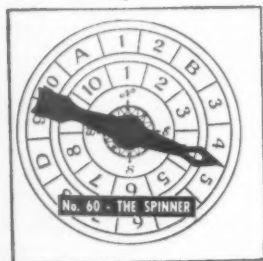


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LETTERS

(Continued from page 1)

tain interesting materials for these preschool age pupils here.

P.I.W., Canada

We present kindergarten material each month in *Junior Arts and Activities*. Many of our primary projects are, in their simple outlines, suitable for kindergarten.

Also, we suggest that you write: Earl J. Jones, Publisher, 740 Rush St., Chicago, and ask for his catalogue of material. The Kenworthy Educational Service, Buffalo 3, New York, has material among which is their "Year 'Round Drawings to Color" which should fit your requirements.

Dear Editor:

Could you suggest anyone our P.T.A. might get to discuss handicrafts or hobbies. We should like to have someone to give practical ideas or demonstrations which parents might follow.

M.S., Indiana

The following individuals may be able to give such talks or, if not, suggest someone who does so.

Mrs. Agnes Sasscier, 46 N. Menard, Chicago, Ill.

Mrs. Alden Scott Boyer, 845 Drexel Blvd., Chicago, Ill.

Mr. G. A. Waddle, Educational Promotional Manager, American Crayon Company, Sandusky, Ohio.

The latter individual has representatives of his organization in Indiana and one of them might be contacted through him. The former two people are connected with the magazine *Hobbies*.

Note: See also Harold R. Rice's discussion on page 32 of this issue.

Dear Editor:

Can you tell me where I can buy scripts for a puppet show?

E.S., South Dakota

The following books of puppet plays are suggested:

Hoben: *Beginner's Puppet Book* (Noble and Noble, 100 Fifth Ave., New York, 1938, \$2.00). In addition to directions for puppet making there are several plays.

Everson: *Puppet Plays For Children* (Beckley-Cardy Co., 1632 Indiana Ave., Chicago 16, \$1.00). Especially good.

Hamburg Puppet Guild: *Dancing Dolls* (Samuel French, 25 W. 45th St., New York, 1937, 75c). Apparently for older children. Samuel French also has several separate plays for puppets in inexpensive (less than \$1.00) editions. We suggest that you write for his catalogue.

USING PROJECT MATERIAL IN THIS ISSUE

During the coming school year we shall present a calendar each month. (See page 6.) This is not inserted in *Junior Arts and Activities* merely as a form of decoration. We have tried to make it as usable as possible. First of all, the dates listed on the calendar are explained on page 43. It is hoped that many of these may prove useful to teachers of intermediate and upper grades especially in connection with social-studies, nature, and literature units. The design of the page itself we have planned to appeal to younger children, to carry out seasonal themes, and to serve as a suggestion for monthly blackboard and window decorations.

In working out a unit on the United Nations, it might be profitable as well as entertaining to devise projects based on the arts and crafts, manners and customs, of all or many of the member nations. Or, perhaps, one large project could be worked out in which the variations of many nations in a single craft could be shown. Textile decoration might be the subject for this large project.

Keep the blueprint-poster idea (page 15) in mind for use several times throughout the year. Very effective Christmas posters can be made, the blue color being a popular one at that season of the year.

"September Blackboard Decorations" (page 24) are patriotic in theme. There is a wealth of available material about fall fruits and flowers, other favorite September motifs for such decorations. In addition, older children might select objects found at the County Fair, make sketches of them, and transfer these pictures to windows or blackboards.

With the September issue we reintroduce teachers to the woodworking projects of Jerome Leavitt. (See page 25.) This year's series will consist of simple projects for children of the primary and intermediate grades. The author has made the directions explicit and has specified simple materials. These projects should prove very useful.

The directions for constructing a greenhouse in the classroom (pages 36 and 37) should prove helpful even though you do not plan to have this unit

in your class. Notice several of the hints about construction. These are equally applicable in several construction projects. The substitution of several materials should also be noted.

The seatwork on page 38 requires some explanation. First of all, the teacher should select subjects similar to those we have shown. These may be reproduced by any method available to the teacher. Care should be taken so that the pictures are large enough and bold enough to cause no confusion in the minds of the children. They should be easily identifiable. The three words lettered beneath each picture are for the inspection of the children. They should choose the proper one and underline it.

If reading readiness is the goal of the teacher, block letters of the proper word might be placed beside the picture and the children given slips of paper from which to choose the one having letters like those in the proper word. This matching is a very good exercise.

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JUNIOR GUILD SELECTIONS

Junior Literary Guild selections for August are: *Sammy* by May Justus (boys and girls, 6-8); *Bright April* by Marguerite de Angeli (boys and girls, 9-11); *Jungle Journey* by Jo Besse McElveen Waldeck (older girls, 12-16); and *The Scrapper* by Leland Silliman (older boys, 12-16).

September selections are: *Greylock and the Robins* by Tom Robinson (boys and girls, 6-8); *The Wonderful Year* by Nancy Barnes (boys and girls, 9-11); *Topflight: Famous American Women* edited by Anne Stoddard (older girls, 12-16); and *The Wild Dog of Edmonton* by David Grew (older boys, 12-16).

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JUNIOR ARTS & ACTIVITIES

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FOR THE ELEMENTARY
TEACHER OF TODAY

ANN OBERHAUSER

Editor

M. E. LITTLE

Staff Artist

AMY SCHARF

Assistant Editor

Contributing Editors

HAROLD R. RICE

Head, Department of Graphic
and Plastic Arts
Professor of Commercial Design
University of Alabama

MARIE G. MERRILL

Author of Songs and Plays

LOUISE B. W. WOEPPEL

Assistant Professor of Music
Dana College
Blair, Nebraska

YVONNE ALTMANN

Kindergarten Director
Oshkosh, Wisconsin

GEORGE C. MCGINNIS

Principal, Thousand Oaks School
Berkeley, California

JEROME LEAVITT

Industrial Arts Supervisor
Senior High School
St. Petersburg, Florida

HELEN M. WALTERMIRE

Teacher and Writer
for the Elementary Field

GRACE E. KING

Writer of Books on
Elementary Education

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THIS MONTH

September, 1946

Volume 20 Number 1

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From the Editor's Desk . . .



A sunny classroom, rows of children (all different, all giving promise of many hours of happy work together), a program of study, and a teacher fresh from years of preparation or filled with new ideas gained in summer classes or relaxed after a summer of unusual activities—these are the raw materials to be found in thousands of schools all over the country this September. They are important. But the question is, How will these raw materials be combined? This is a creative undertaking and like all such projects the creator is also one of the raw materials. What master plan is in the mind of the creator?

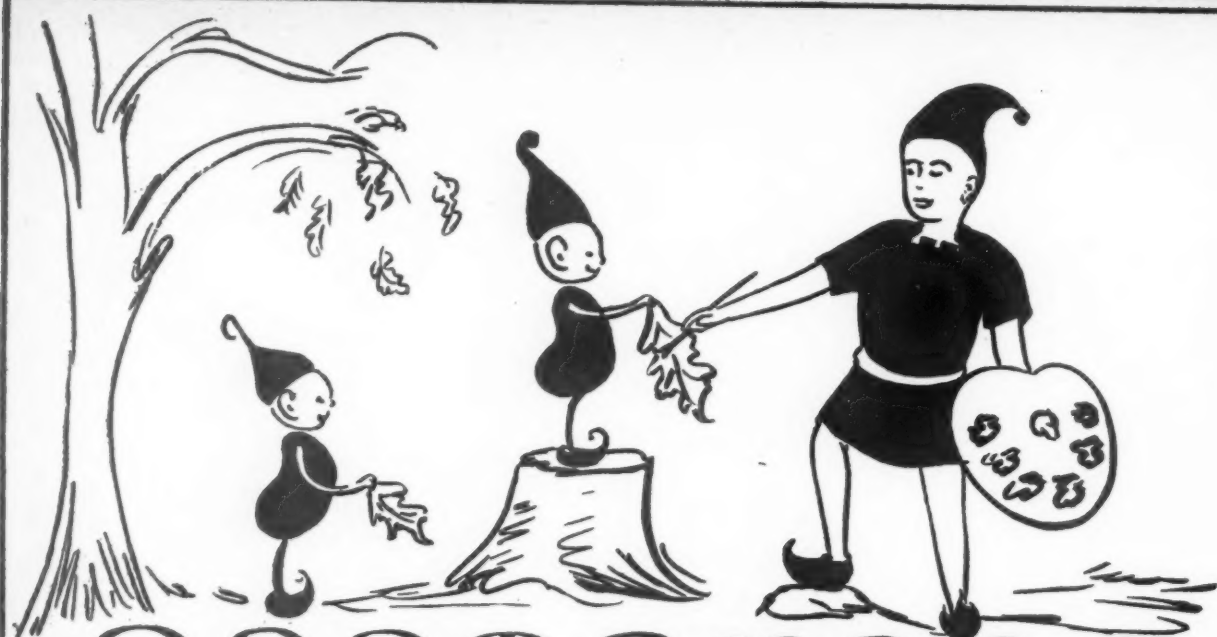
You, the teacher, are in the same position as an author, a painter, a sculptor, a poet, a composer. Your personality will be indelibly stamped on the finished project. But will it be a mighty symphony or a sentimental ditty? In other words, what is your basic philosophy?

Every day we hear laymen say that the schools should teach thus and so. They should teach the constructive use of leisure time. They should teach thrift. They should be primarily concerned with fundamental skills. They should place less emphasis on skills and more on democratic living. They should inculcate ideals of responsibility to the group. They should concentrate on teaching responsibility of the individual to himself. They should accentuate moral ideals. And so on. The list is endless. You may well be confused and annoyed by this barrage of "should's." You may very well say that laymen set before you an impossible task. You may with justification reply that there are other agencies to assume part of the responsibility of the development of children. And you may demand that they play their adequate part in the total development.

One of the principal agencies is the home, as everyone knows. It is the individual's as well as society's duty to determine what part the home shall play and what shall be left for the schools and other agencies. But if you admit that the home is in some respects deficient (taking the situation in general and not particular instances) then the question arises, Is this a chain reaction which cannot be stopped? or, Can something be done to bring future homes to a realization of their responsibilities? This brings you right back to the schools; for if the homes are deficient, they will obviously not correct this of themselves.

This is our view: that it is only the schools of the present day which can make light the problems of the schools of tomorrow by so encouraging pupils that they will make their homes inspiring places for future children.

—Editor



SEPTEMBER

S	M	T	W	T	F	S
1	LABOR DAY 	3	4	5	6	7
8	9	10	11	12	J.J. PERSHING 	14
15	16	Constitution Day 	18	19	20	21
22	FIRST DAY OF AUTUMN 	24	BALBOA DISCOVERED THE PACIFIC 	26	27	28
29	30					

A UNIT ON THE UNITED NATIONS

FOR UPPER GRADES

By ANN OBERHAUSER

A unit to arouse the enthusiasm of the class early in the year is not easy to devise. Something is needed to start the ball rolling, so to speak. Since the United Nations and various organizations connected with it are very much in the news, and since any study of the United Nations involves history, geography, democratic principles, citizenship, and allied subjects in the very nature of things, this topic might be chosen to inaugurate the social-studies program at the beginning of the school year.

While it is possible to work out a unit on this topic for use in the intermediate grades, we have slanted the following outline for the upper grades. With suitable modifications it could, of course, be used on other levels.

APPROACH

Meetings of some of the organizations connected with the United Nations (for example, the Food and Agriculture Organization) may be in progress and accounts of their proceedings published in newspapers and other periodicals. The world food crisis and our own attempts to alleviate it are powerful forces to stimulate interest in the work of specific groups of nations and the United Nations itself.

There are other ways to approach the subject and to stimulate interest. If a problem in design is first on the agenda of the art curriculum for the year, the emblems and insignia of the United Nations might be presented for study. If the class plans a study of the Constitution of the United States (for Constitution Day, September 17), a comparison might be made with the Charter of the United Nations.

OBJECTIVES

1. To understand something of the machinery of the United Nations.
2. To realize the need for world co-operation.

3. To become acquainted with some of the problems which cause nations to disagree.

4. To acquire a concept of world unity.

5. To learn how the principles of democratic living as practiced in the classroom between two individuals must carry over into national and international relations in order that people may live together in peace and prosperity.

6. To increase knowledge of history and geography.

7. To develop attitudes of tolerance for manners, customs, ideas, and ideals which differ from ours.

8. To prepare a foundation for later work in civics and history.

BEGINNING THE UNIT

After the class has expressed an interest in this subject and a desire to embark upon a unit about the United Nations, the boys and girls should bring newspaper clippings, magazine articles, and pictures outlining various aspects of the organization. Some of these should be placed on the bulletin board for all the class to see. Some should be read to the class by the individual who brought them. After this reading, a class discussion should follow.

Regarding class discussions, we should like to insert this caution. The United Nations has so many possibilities for discussion (including those that begin, "My father says . . .") that care must be exercised so that a co-ordinated and well-rounded conversation will result. Our suggestion would be to allow some of this exploratory rambling at the beginning once the unit has been definitely decided upon but after that it should be confined into purposeful channels which will advance the progress of the study.

Among the things to be discussed is the plan for the study. We suggest that the various sections of the charter, the

various organs of the United Nations, and so on be listed on the blackboard and committees chosen to investigate each. It should be noted that each chapter of the charter need not be studied but the general purposes and provisions in the more important ones should be explored. Other committees should have as their projects the historical background for the United Nations, some of the personalities involved, and other topics of similar nature.

Next comes planning the projects for the unit. The children might work together to make a large classroom chart graphically depicting the manner in which the United Nations and its organs work. At the end of the unit they should all be able to explain the chart and to give the broad outline of the work of the various departments.

In order to stress more forcibly the ideals of tolerance and understanding, the teacher might suggest that projects concerned with the creative expressions of the member nations be undertaken.

Another activity desirable during the unit is concerned with creative writing. Plays and skits, stories, poems, outlines of the results of research, and so on, should be written by committees of children and by individuals.

DEVELOPMENT OF THE UNIT

I. How the United Nations came into being

A. The Atlantic Charter (1941)

B. The Declaration by the United Nations (1942)

C. The conferences on Food and Agriculture and on Money and Finance.

D. The Moscow Conference (1943)

E. The establishment of the United Nations Relief and Rehabilitation Administration (1943)

UNITED NATIONS

F. Preliminary organizational meetings: Dumbarton Oaks Conference, the United Nations Conference on International Organization (San Francisco)

This section of the unit stresses the need for co-operation among nations and how that need was met while the war was still in progress. Depending on the age level of the pupils, the consideration may be brief or extended. If possible a copy of the Atlantic Charter might be secured and read to the class. Also it should be noted that a detailed discussion of the United Nations Relief and Rehabilitation Administration should be omitted until later on when the children have an understanding of the United Nations as a whole.

II. The Charter of the United Nations

A. Where and how was it composed?

B. Of what does it consist?

1. Preamble

2. Nineteen chapters

C. What do the chapters contain?

1. Statement of purposes and principles

2. Details about the membership

3. Details about the organs of the United Nations

a. The General Assembly

b. The Security Council

c. The Economic and Social

Council

d. The Trusteeship Council

e. The International Court of

Justice

f. The Secretariat

4. Special details

a. Settlement of disputes

b. Amendments and ratification

tion

In a discussion of the Charter such questions should be raised as: What is the general purpose of the Charter? Is it a constitution? What are the duties of each of the organs? How are the nations represented in each of the organs? When do the various organs meet? Did the United States ratify the Charter? Is the United States a full-fledged member?

It should be noted that in the outline we have not included such details as the financing of the organization, regional arrangements, transitional security arrangements, and a few more. These may be beyond the children's comprehension and they are not necessary in order that the children have a broad, general understanding of the United Nations as a whole. Of course, they may be included.

III. Have nations ever tried international co-operation before?

Here is the place where the children's knowledge of history will play a part.

Of course, the League of Nations is the most noted example of attempts in the direction of co-operation but it is not the only one. If the children have studied European history they will have learned about several alliances and congresses which attempted this. Of course, in the Western Hemisphere there is the Pan American Union and the "good neighbor" policy which are aids in keeping the peace and securing prosperity.

All these should be investigated. If the children have not studied them before, this experience may lead to a desire to learn more about them. If they are familiar with these plans for co-operation they can use their knowledge at the present time.

IV. Personalities in the United Nations

A. Who was the leading spirit towards the founding of the old League of Nations? (Woodrow Wilson) Was his program a good one? Why did it fail? (The children cannot be expected to mention the deep-seated reasons but if they point out that the United States was not a member of the League they will be on the right track.)

B. Who was the leading spirit in the founding of the United Nations? (Franklin D. Roosevelt) What other leading statesmen were also instrumental in establishing this organization? (Winston Churchill, Joseph Stalin)

C. How were the members of the American delegation at the San Francisco conference chosen? (By the president of the United States.) Who were they?

D. Who are some of the American members of the United Nations General Assembly? How were they chosen?

E. Who is the United States representative on the Security Council?

V. A study of some of the organizations of the United Nations

A. The United Nations Relief and Rehabilitation Administration

While this is not the only organization of the United Nations, its present importance is such that children should study its workings carefully. Its aims are to feed the peoples of war-torn countries and to enable them again to assume their normal manner of living. Since there has been so much written about the UNRRA in newspapers and other periodicals it seems unnecessary to outline its work here. However, the class should not overlook this very important agency.

B. The other organizations of the United Nations

Because new organizations are being formed as needs arise, we suggest that the class consult current publications

for details for this section.

CORRELATIONS

The most important correlations are in the fields of geography, history—social studies in general; health; language; reading. The art, music, and other cultural achievements of the various members of the United Nations should not be overlooked. In construction and in a consideration of the money and finance conference arithmetic problems will be involved. Here, too, is a good place to introduce children to the monetary differences among nations. The unabridged editions of dictionaries and many encyclopedias give tables of the various units and their value in American money.

Art correlations based on the design symbol of the United Nations, the problem of making posters to urge international co-operation on an even greater scale, on the utilization of the arts and crafts of the member nations, and so on.

A LIST OF THE UNITED NATIONS

(This list contains only those nations which were members as of January 1, 1946. Teachers should be on the alert to include any which may have been admitted since that time.)

Arabia, Argentina, Belgium, Bolivia, Brazil, Byelorussia (one of the soviet republics), Chile, China, Colombia, Commonwealth of Australia, Commonwealth of the Philippines, Costa Rica, Cuba, Czechoslovakia, Denmark, Dominican Republic, Dominion of Canada, Dominion of New Zealand, Ecuador, El Salvador, Egypt, Ethiopia, France, Greece, Guatemala, Haiti, Honduras,

India, Iran, Iraq, Lebanon, Liberia, Luxembourg, Mexico, Netherlands, Nicaragua, Norway, Panama, Paraguay, Peru, Poland, Syria, Turkey, Ukraine (one of the soviet republics), Union of South Africa, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States, Uruguay, Venezuela, Yugoslavia.

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1946 *Britannica Book of the Year* (Encyclopedia Britannica, Inc., Chicago, Ill. Contains text of the United Nations Charter.)

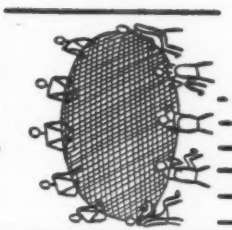
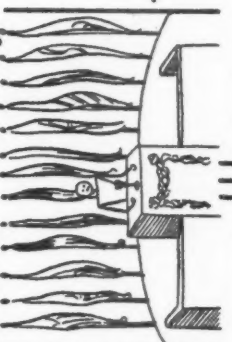
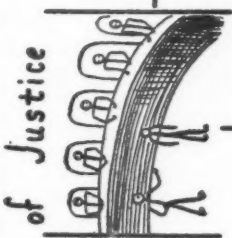
"We, the peoples . . ." a Brief History of the United Nations (Education Committee, American Association For the United Nations, Inc., 45 E. 65th St., New York 21, 15c). This organization also has many other pamphlets and much additional information on the subject. Write for their lists.

THE UNITED NATIONS

International Court
of Justice

General Assembly

Security Council



ECONOMIC
& SOCIAL
COUNCIL

SECRETARIAT

TRUSTEESHIP
COUNCIL

ECONOMIC
COMMISSIONS

SOCIAL
COMMISSIONS

COMMISSION ON
HUMAN RIGHTS

OTHER
COMMISSIONS

SPECIALIZED AGENCIES			
ECONOMIC	SOCIAL	EDUCATIONAL AND CULTURAL	HEALTH
			OTHERS

MILITARY
STAFF
COMMITTEE

REGIONAL
SECURITY
ARRANGEMENTS
& AGENCIES

NATIONAL CONTINGENTS OF ARMED FORCES		
AIR	SEA	LAND

Direct relationship as
defined in the charter

Relationship to be determined by
special agreements or arrangements

CHINESE CHARACTERS IN ART

三

3

六

6

二

2

五

5

Learning to count

一

1

四

4

中美是好友



開日

While we have suggested Chinese characters for this project, we might just as well have chosen Arabic, Russian, Greek, Hebrew, or Hindu alphabets. The idea is to become familiar with ways of writing other than our own. That is an important step in world cooperation and tolerance and boys and girls should have this background. If you can secure specimens of some of the alphabets we have mentioned, compare them with the Chinese and with our own.

Most children have had experience in using our alphabet to make border designs, notebook decorations, and so on. Chinese characters offer even greater possibilities. Look at the characters and designs on this page. Let the children look at them. Use them in combination with characters from other forms of writing.

Words built on
the character
for "Man"

大

天

太

人

囚

IT'S FRANCE FOR HATS



For a festival in Normandy, the women don hats like this.



Grandmothers of present-day residents of Brittany wore hats like this sugar-loaf model.

Everyone knows that French men (and women) are very patriotic. They are proud of their native land. Yet they preserve the customs and manners of their individual provinces to a remarkable degree. Surely there is a parallel between this blend of provincialism and nationalism. It can serve as a lesson to all the world to combine nationalism with international co-operation for the benefit of all.

We think the study of French folk hats is a good illustration of the differences in France. Have the children look on the map to see where these hats are worn on special occasions. Since many modern hats are based on folk styles perhaps some enterprising girls may try to design hats using these for ideas. Also, the children may compare hats of many countries instead of those of France alone.



Also from Normandy comes this beautiful lace hat.



On holidays, the women of Ariège wear models of this prim bonnet.



An old-fashioned farm woman from the Morvan mountain districts might wear a hat like this.



There is a special dance in the village if the girls in some districts of the French Pyrenees put on hats such as this.

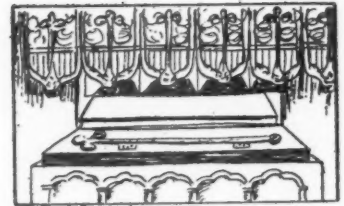
WOODROW WILSON



The Panama Canal was opened during Wilson's administration.



Women's suffrage was obtained while Wilson was president.



Wilson's tomb.



Princeton University, where Wilson served as president.



Wilson's birthplace at Staunton, Virginia.

Thomas Woodrow Wilson was president of the United States during the First World War. He was elected to that office after serving as governor of New Jersey and as president of Princeton University. Wilson was born in Staunton, Virginia, in 1856. He studied in two colleges before obtaining his highest degree at Johns Hopkins University. Thereafter he taught, wrote, and lectured about government and politics. Some of his books are still regarded as the most important in their fields.

Wilson was elected president at an important time. The United States was among the victorious powers of the First World War.

Wilson's greatest achievement was his attempt to bring the nations of the world together to prevent war. It was also his greatest failure because the United States did not join his League of Nations and that organization did not prevent another war.

Woodrow Wilson died in 1924.



ACTIVITIES IN THE KINDERGARTEN

A MASTER OUTLINE FOR SOCIAL SCIENCE UNITS A UNIT ON HOUSES

By YVONNE ALTMANN
KINDERGARTEN DIRECTOR
OSHKOSH, WISCONSIN

Miss Altmann's units throughout this year will be concerned with social science studies. The following is a master outline to be used in connection with the units.

Miss Altmann has carried out each of these units in her own kindergarten. However, teachers will undoubtedly choose to adapt certain points and ideas to fit individual situations, facilities, and talents. The general, broad application of this outline can be utilized as it is in all of Miss Altmann's articles for this year. It should be noted that the principal motivating force in the outline (and in the units to follow) is the excursion.

SOCIAL SCIENCE UNIT OUTLINE

I. Motivations

- A. Other activities and experiences of children
- B. Books placed in conspicuous places for children to see
- C. Poems, songs, stories, and dramatizations
- D. The children's environment
- E. Conversation periods

II. Objectives

- A. General—To help the children
 1. To develop fuller experiences in living
 2. To develop social consciousness
 3. To develop their interests
 4. To develop a deeper appreciation for their community as it affects their lives
 5. To develop a better understanding that their comfort and well-being depends upon the work of many people
 6. To work happily with one another
 7. To express themselves fearlessly in their creations
 8. To gain further skill in tool subjects
 9. To form good habits and attitudes in appreciation subjects
 10. To strengthen observatory powers
 11. To acquire a greater knowl-

edge of their local environment

12. To become curious about everyday things

13. To co-operate with their community

14. To provide themselves with a background of knowledge of their community

15. To help them to develop reading readiness

B. Specific (See units each month)

III. Development of the social science unit

A. Visit many places in the community

B. Children and teacher ask questions about the places visited

C. Teacher, community helpers, reading, pictures, music, and movies help answer children's questions

D. Make books of excursions

E. Leads to associated and other creative activities

IV. Outcomes

A. Skills in which children become more adept

1. Finding stories about the unit

2. Thinking about and discussing the social science unit

3. Increasing their vocabularies

4. Speaking before the group

5. The school subjects — manuscript writing, spelling, arithmetic, music, stories, poems, health, reading, and language activities

6. Handling of many different kinds of art mediums

7. Organizing material and making books on social science units

8. Imaginative development through dramatic play

B. Knowledges to which children add information

1. The places visited in the community

2. The part the family plays in the community

3. The community helpers

C. Attitudes children show

1. Acceptance of responsibility

2. Recognition of strengths and weaknesses in others

3. Confidence and poise

4. Consideration for the rights of others, self-control, and courtesy

5. Greater interest in the community and in the community helpers

6. Pride in accomplishments

7. Increased willingness to co-operate

D. Appreciations of which children are made more aware

1. An orderly and logical development of a social science unit

2. The community and the community helpers

3. Their own abilities and those of other children

V. Integrations

A. All school subjects or periods

1. Outdoor play and excursion period

2. Activities and art period

a. Make books on the social science unit

3. Conversation (nature study, health, safety, children's interests, news) and poem period

a. Discuss social science unit.

b. Plan excursions.

c. Discuss things to remember when going on excursions.

d. Plan what the group wants to find out on the excursions.

e. Discuss and record what they found out on the excursions.

f. Discuss and record complete information for material to be used in the social science books.

g. Learn poems.

h. Make up poems.

4. Music period

a. Sing songs.

b. Make up songs and music.

c. Have rhythms about the social science unit.

- d. Make up rhythms.
- e. Interpret the excursions through rhythm-band music.
- 5. Story, dramatization and game period

- a. Listen to stories.
- b. Make up stories.
- c. Dramatize activities.
- d. Play games.
- e. Make up games.

- 6. Rest period
 - a. While resting think about the social science unit.
 - b. Listen to restful music which has some connection with the unit.

7. Arithmetic period (In kindergarten this takes place in any period.)

a. Counting

(1) Count number of children in the group.

(2) Count number of tables needed for children to work on while drawing pictures for the books.

(3) Count number of pages needed for the books.

b. Recognize written numbers.

8. Reading readiness

B. Greater attention given to listening to discussion, reading material, stories, poems, songs, and rhythms

C. Conversational ability improves as the children discuss the unit.

D. Manuscript writing becomes very essential when they make the books.

A UNIT ON HOUSES

I. INTRODUCTION AND MOTIVATION

This is a unit which works out very well for the month of September. The simplest way to begin is for the teacher to draw a picture of her own house. This will lead to a desire on the part of the children to do the same. Some of the pictures they draw should be put up around the room. "My House" can be lettered large enough for easy view and thumbtacked under several pictures. Discussions of the children's houses naturally follow. These may in turn lead to drawing maps on how to get from school to the children's houses.

II. OBJECTIVES

A. General (See master outline.)

B. Specific—To help each child

1. To want to visit the homes of his classmates
2. To learn about the different types of houses
3. To learn about the different construction materials
4. To learn about the parts of the house

5. To learn about the builders of the house

6. To find out any information the child wants to know about the unit on houses

7. To understand the desirability of thanking the community helpers who tell about how the house is built

8. To learn how the community and its helpers (the builders of houses) help the child to live a happier life

9. To make a book on houses, or to contribute to the class book

III. DEVELOPMENT

A bright, sunny day found our kindergarten children taking a walk to explore the surrounding school area and to see some of the children's houses. For several days an enthusiastic class drew pictures of and discussed houses. A floor plan of a house was made before we visited a house which was being constructed in the neighborhood. This led the children to realize how many different kinds of workmen are needed to build a house. The workmen willingly answered the questions of the children.

The children wanted to put the information about houses in book form. Since crayon is the easiest medium for little children to work with, they decided to use that for the pictures in their book. They drew pictures of houses. The pictures were discussed and the best ones were saved to put in the book. The pictures had been drawn on 9" x 12" manila paper. The sheets were stapled to purple construction paper. The facts about the illustration were typed with primer type and stapled to pages opposite the appropriate pictures.

The book cover was made from yellow construction paper 10½" x 13". Oaktag, the same size, was put between two sheets of this colored paper. A 9" x 12" sheet of purple construction paper was placed on one side. The paper was stapled (it can also be pasted) together. We made another cover. The word HOUSES was cut freehand out of yellow construction paper. The letters were 5" high and 1½" wide. We pasted the letters on one of the covers and reinforced them with staples. The pages were put between the covers and tied together with a shoelace.

The unit on houses led to associated and other creative activities:

1. Playing house
2. Building a house out of blocks
3. Playing the part of the builder
4. Using other art mediums to make a house (clay, paint)
5. Making up stories about their houses and their friends' houses and imaginary houses

6. Creating pieces on the piano

IV. OUTCOMES

A. Skills in which children became more adept

1. Thinking about and discussing houses
2. Increasing their vocabularies
3. Speaking before the group
4. Counting
5. Health—manners, proper food to eat at mealtime
6. The handling of crayon as an art medium

7. Dramatic play

8. Organizing material

B. Knowledge to which the children added information

1. Houses
2. The part they and their families play in the house
3. The part the community helpers play in building their houses
4. The community helpers—in this case builders of houses

C. Attitudes (See master outline.)

D. Appreciations of which children became more keenly aware

1. An orderly and logical development of the unit on houses
2. Their houses and families and their places in the group

V. INTEGRATIONS

(See master outline)

VI. LED TO OTHER UNITS

Communication, more complete study of any or all of the builders of houses, building a playhouse, maps, manners, health, and flower gardens

VII. BIBLIOGRAPHY

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3. "An Order by Phone," *Child-Land in Song and Rhythm*, Jones and Barbour; The Arthur P. Schmidt Co., 8 W. 40 Street, New York, N. Y., p. 60

C. Singing Rhythm Games

1. "Monday Is Our Washing Day," *The Children's Book of Songs and Rhymes*, Harriet Blanche Jones and Florence Newell Barbour; The Arthur P. Schmidt Co., 1926, p. 40

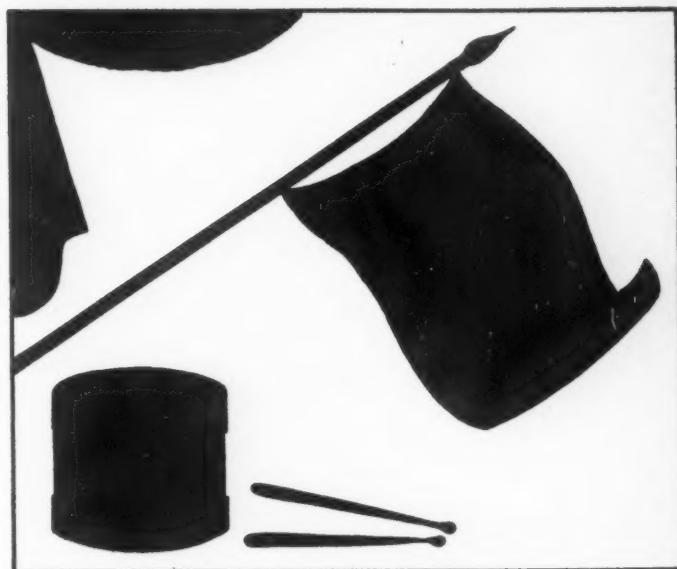
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BLUEPRINT POSTERS

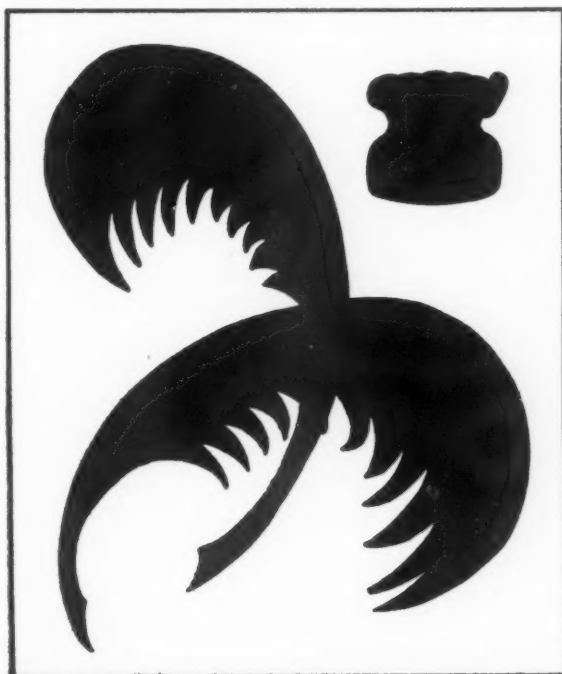
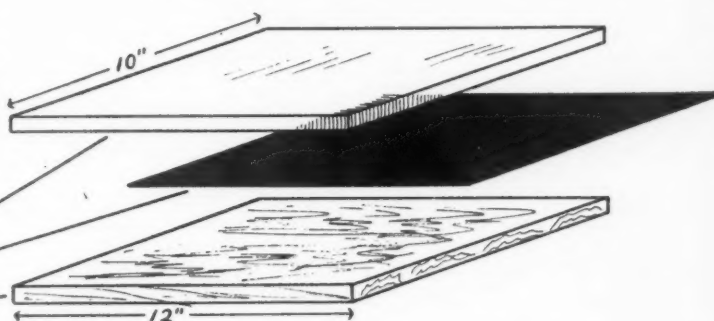
Materials required: blueprint paper, preferably rapid for daylight use; small amount of potassium bichromate; one pane of glass 10" x 12" or size of prints to be made; one piece of plywood the same size as glass.

Method: Cut the blueprint paper into required sizes which should not be larger than the glass. This must be done in a darkened room and the paper kept from light until it is meant to be exposed. When ready to make the print, lay the paper on the plywood, center on the paper the specimen to be printed, cover both with glass, and expose to the light. Hold the glass tightly against the plywood. Expose until the paper turns from cream to blue then back to cream. Remove and rush into the developing solution. The developing solution is 1 tablespoon potassium bichromate dissolved in 2 gallons of water. (Potassium bichromate is poison. Immersion of hands in it is safe, but wash hands carefully after immersion.) Leave in the solution at least 5 minutes, longer won't matter. Remove and wash in cold water. Then dry between newspapers or blotting paper. The finished print should be pure white on a background of dark blue.

By preparing stencils, posters are easily made. The stencils should be cut so that those areas to be white on the finished blueprint poster are *not* cut out. The illustrations shown appear as they would look before the stencils are placed on the blueprint paper. Blueprints can be made for historical scenes, maps, charts, graphs and many other things.



PANE OF GLASS
BLUEPRINT PAPER
PLYWOOD



SCIENCE ACTIVITIES

THE ATMOSPHERE IN WHICH WE LIVE

By GEORGE C. MCGINNIS
PRINCIPAL, THOUSAND OAKS SCHOOL
BERKELEY, CALIFORNIA

"—or would you rather be a fish?" Did you ever think of yourself as living like a fish? Well, there isn't a great deal of difference. Fish swim about in a fluid called water, while you and I walk, ride, or fly in a fluid called air. It is all about us, even inside of us in our lungs.

Do you remember walking along the same street day after day and then discovering something which had been there all the time but something which you just hadn't seen before? We are going to discover that which is all about us but which we have never seen.

There is a great blanket of air which completely surrounds the earth. We call this blanket of air the atmosphere. It may extend from 40 to 200 miles above the surface of the earth. As we rise from the surface of the earth the air becomes thinner or less dense. At the surface it is found to be most dense. If we were to go down into a mine or cave which extended below sea level, we would find the air to be even heavier or more dense than it is at the surface.

The force of attraction or gravitational pull of the earth is what makes most of the air stay close to its surface. If the force of gravitation were suddenly lost, our atmosphere would disappear into space.

Any part of our atmosphere up to a height of 8 miles is called the troposphere. This is almost as high as man has flown in airplanes. Most rain clouds are between 1 and $2\frac{1}{2}$ miles above the surface. Most commercial airplane flights are made at a height of about 2 miles. Soon we shall have planes which will fly much higher.

Man cannot live in the troposphere much above $3\frac{1}{2}$ miles unless he uses an oxygen mask. This is why famous mountain climbers who have tried to climb Mt. Everest have used oxygen. Mt. Everest, in India, is the tallest mountain in the world. It rises to

nearly 6 miles above the sea.

Above the troposphere is the zone which we call the stratosphere. About the only way man has been able to reach this zone is in balloons which float in the air just like a submarine floats in the water. And like submarines, these balloons must have air-tight, sealed cabins for the pilot. The pilot could not live if he were exposed to the extreme cold and lack of air in the stratosphere. The highest that any balloon, piloted by man, has reached is just above 13 miles. A pilotless balloon has risen as high as 22 miles. During the war the German V-2 rockets were thought to have traveled as high as 75 miles in the stratosphere.

It is the air that keeps us from getting too cold at night and too hot during the day. If we were on a body like the moon (which has no atmosphere at all) we would be burned to death by the heat of the sun during the day, and the minute the sun dropped below the horizon we should freeze like so many snowmen. The air absorbs the intense heat of the sun's rays during the day and permits just the right amount of heat and light to reach the surface of the earth so that we are comfortable—most of the time, anyway. Then at night when the sun has disappeared, the air and the earth give off the heat which they absorbed during the day.

Can you imagine what it would be like to never have a beautiful sunset with its shades of red and gold, or to have it suddenly change from blinding daylight to total darkness in a second's time. That is just what would happen if there were no air.

Have you looked into the sky and wondered what made it so blue? It is the way sunlight is affected by our atmosphere. If you were high up in the stratosphere and looked up, away from the sun, the sky would look black. The air is not dense enough there to

affect the sunlight.

You have often stood on the top of a hill and watched the stars or the lights of a city twinkling 'way off in the distance. The stars or the lights were not flashing on and off as they appeared to be. That was due to warm air rising from the side of the hill and causing the rays of light to bend as they passed through layers of warm and cool air. Astronomers build their observatories on the tops of mountains not to get them closer to the stars, as some people think, but to avoid the rising warm air which would make the stars appear to move or twinkle.

The air is a mixture of several different gases. As you already know, it is most dense at the surface of the earth and becomes less dense at any great distance from it. It also changes in the kinds and amounts of gases which we find in it, as we rise any distance above the earth. So we usually try to find out what the air at sea level is like since it is nearly always the same there.

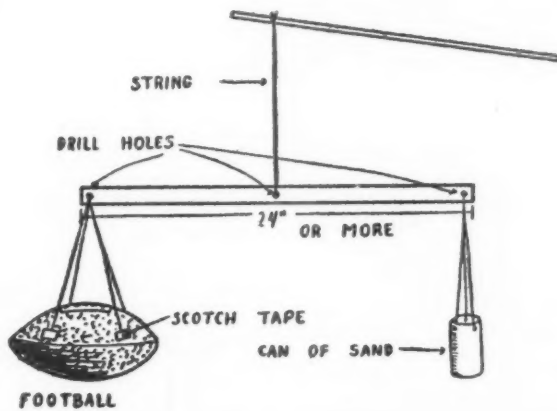
The gas nitrogen makes up about $\frac{4}{5}$ or 80% of the air at sea level. It is a gas which does not burn or help other things to burn and is of very little use to people or animals except to fill up space. Plants, however, find it very useful and certain kinds of plants, such as beans and alfalfa, are able (with the help of tiny living things called nitrogen-fixing bacteria) to take it from the air and use it for food.

Oxygen makes up nearly $\frac{1}{5}$ or 20% of the air and is the most important part of the air to us. We breathe it and take it into our bloodstream through the lungs. Without oxygen all animal and plant life would die. Without it man would not have fire since nothing would burn. It would truly be a cold world for us without this life-sustaining gas.

There are other gases, such as carbon dioxide, argon, neon, water vapor,

(Continued on page 42)

EXPERIMENTS



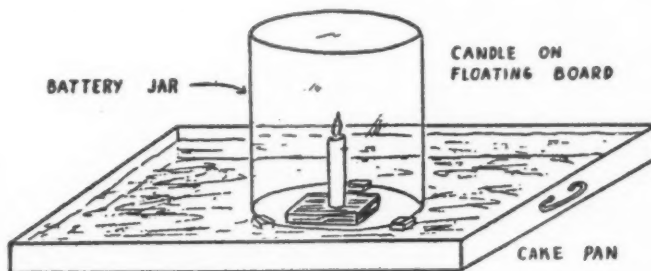
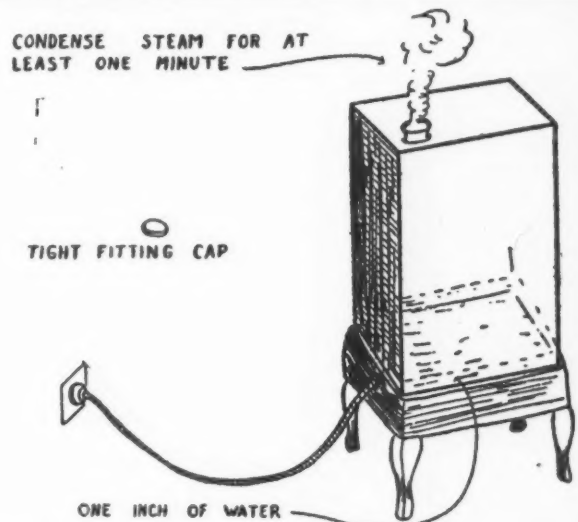
1. DOES AIR HAVE WEIGHT?

To arrange the balance as shown in the picture, obtain a long stick (an old yardstick will do nicely) and punch three holes: one *exactly* in the center; one at each end *exactly* the same distance from the edges. A string through the center hole should be attached to a freeswinging stick held in the hand. The football should be pumped up hard. Pour just enough sand in the can at the right so that the balance is level. (The football may be attached to the strings with scotch tape.) Now let the air out of the football. What has happened to the balance? Why?

2. HOW GREAT IS THE FORCE OF THE AIR?

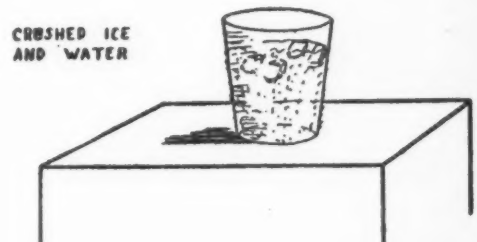
For this experiment the most important property is a can—a lightweight metal can. There are many such types of cans which may be used: cans which have contained cleaning fluid, maple syrup, or other liquids. Extreme care should be exercised to see that cans which have contained inflammable liquids are thoroughly washed before the experiment begins. We suggest a thorough soaping, rinsing, and drying.

Be sure to have a cap that will fit the can *tightly*. The experiment will not work unless it does. Pour about 1" of water in the bottom of the can. Leave the cap off and place the can on an electric hot plate. Leave it there until steam is seen to rise from the opening. Let the steam rise for at least one minute. Then, put the cap on tightly and remove the can from the hot plate. What force has caused the can to collapse? Why did it do so after the experiment and not before?



3. HOW MUCH OXYGEN IS IN THE AIR?

Arrange your apparatus as shown in the picture. Be sure that the edge of the jar is well below the surface of the water. Light the candle, place it on the water, and carefully place the jar over it. Why does the candle go out? What causes the water to rise in the jar? What gas has been used in the experiment? How much of it was used? Measure and find out.



4. IS THERE WATER IN THE AIR?

Take a glass and fill it with water and crushed ice. Be sure to dry any water that may have spilled on the outside of the glass. Then let the glass stand awhile. What happens? Where did the drops on the glass come from? Why?

TEACHING COLOR IN THE PRIMARY GRADES

By ANN BALL

VALUES TO BE DERIVED FROM A UNIT ON COLOR

1. An understanding of the basic principles of the theory on color harmony which will be of practical value throughout life.
2. Inculcation of love for the beautiful in nature, in dress, in home decoration.
3. Appreciation of the work of classmates and a kindly expression of appreciation.
4. Appreciation of the work of artists all over the world.

UNIT DEVELOPMENT

The teacher put up around the classroom a great many pictures done in harmonious colors by other children from former terms. These pictures were numbered. They were all done in either complementary, split complementary, or analogous harmony. Some were done in tints and shades of one color.

Together with the pictures was displayed a huge color wheel which had also been done by children of a previous year. When the children came in on Monday there were "Ah's," and "Oh's," and they could hardly wait to remove their wraps they were so anxious to have a "close up" of the display.

The teacher then asked them to make a note of the colorings they liked best. This was done in order to group the children according to similar taste.

In the wall display the pictures were not put up in numerical order; instead they were numbered according to types of color harmony used. For example, pictures 1 to 10 were done in complementary harmony (opposites on the color wheel). Numbers 11 to 20 were done in split complementary harmony (adjoining colors of one of two opposite colors). Pictures 21 to 30 were done in analogous harmony (the children called these colors "neighbors"). Pictures 31 to 40 were done in tints and shades of one color.

When the children had written down the numbers of the pictures they liked best, the teacher asked them to star their first choices. In this way the pupils of similar taste were grouped together and the stage was set.

After the grouping, the children went through the usual procedure of listing objectives, which in this unit took the form of: "What We Want to Learn About Color" and "What We Want to do With Color," and "What We Must Learn In Order to Use Color."

As they all wanted to make a color wheel there followed a lesson in inscribing a six-petaled geometric figure within a circle. For this they borrowed compasses from older children and used a few that were in the classroom.

At the beginning of the term the teacher had asked the children to save the pennies that they would ordinarily spend on notebooks to buy boxes of crayons which contain all the colors on the wheel and the names of the colors printed clearly on the wrappers of the crayons. From past experience the teacher knew that much time is saved if the children learn to know the colors by name and by using them.

To drill on the color names the children played a game. The teacher put up the big color wheel in front of the room and had two children come up at a time and try to name the colors while a third child did the pointing. The child giving the correct name first scored a point for his team. Later when the children had learned to gray the colors by adding a complementary color to the original the teacher put the grayed colors on flash cards and played a similar game. However, in the second game the teacher handed the card to the child who was able to call the correct name of the color first. The winner was the child holding the most cards.

Making and coloring the color wheels took up about one week's arts and crafts periods.

Individual group teaching followed. The complementary harmony group (opposites on the color wheel) learned how to locate a complementary combination by means of a two-pointed arrow. The children also learned to use the triangle for locating a split complementary combination. They were taught how to gray a color by adding its complement. They were taught that this

color combination in full intensity is used when vivid effects are desired. This group made the sign and poster for the unit.

The analogous group called themselves "The Good Neighbor Group." They were taught how to locate their colors on the color wheel. One child reported that he saw in an elevated station a sign on which the artist had used "neighbors," but he added that there was one color that wasn't a neighbor. This led to learning that the opposite of one of the neighbors might be used in an analogous group of colors.

The group using tints and shades were taught how to add white to make a tint, and black to make a shade. The first group taught this group how to add the complement to make a shade of a color.

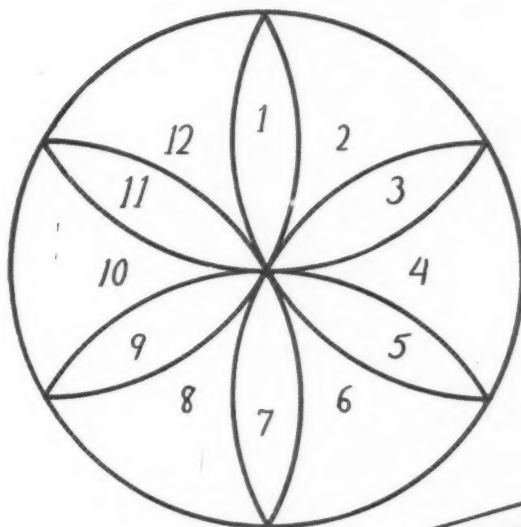
After the children had collected their pictures they thought that perhaps the other children would like to see them so they decided to make a large scrapbook which would have in it the pictures chosen as best during "Show and Tell" periods which were held each week.

A child from another class met the teacher in the school yard and asked if he might come into the class and learn how to make a color wheel. This gave the class the idea of inviting other classes in to see the work they had done with color. Then when the pupils realized that other people were interested they asked if they might invite the school principal.

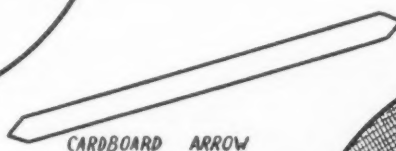
Each group planned a group activity besides contributing individual pictures to the class scrapbook which became so full that extra pages had to be bought. One group illustrated the story of *Heidi* and put it into a moving picture box which one of the children made. Another group dressed pattern-cut paper dolls for a diorama of a wedding procession on a lawn in front of a house like Mount Vernon. Still another group made posters for the unit and display charts for the wall. They made a chart for new words which they learned how to use and spell during the unit.

(Continued on page 42)

THE COLOR WHEEL

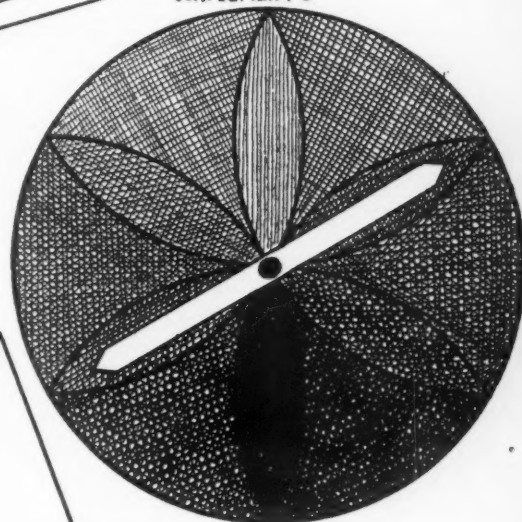


- | | |
|-----------------|-------------------|
| 1. Yellow | 7. Violet |
| 2. Yellow green | 8. Red violet |
| 3. Green | 9. Red |
| 4. Blue green | 10. Red orange |
| 5. Blue | 11. Orange |
| 6. Blue violet | 12. Yellow orange |



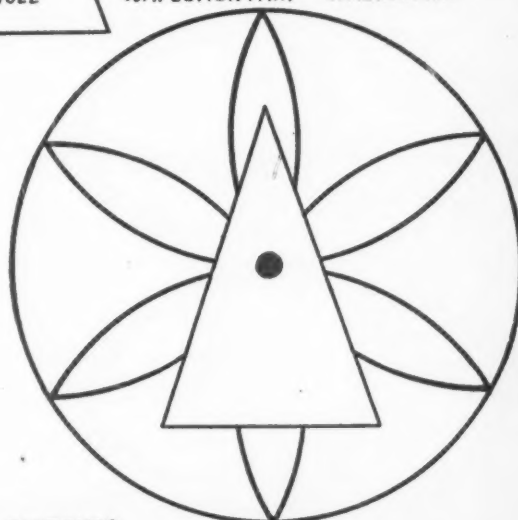
CARDBOARD ARROW

DEVICE FOR LOCATING
COMPLEMENTS



CARDBOARD
TRIANGLE

DEVICE FOR LOCATION OF A SPLIT
COMPLEMENTARY COMBINATION



PAPER FASTENER

The color wheel is essential in a unit such as is described on the opposite page. Four concepts of the use of color may be derived from a use of this color wheel: knowledge of complements, of split complements, of analagous harmonies, and of tints and shades.

To make the color wheel, decide on the size it is to be. Then make a large circle and around the circumference of the circle mark off six arcs through the center and the circumference. Start the second arc with the point of the compass on the spot where one end of the first arc touches the circumference. Continue in like fashion until you have a figure like that shown at the top of the page.

If you wish to make a circle requiring a larger compass than those available, use the string and pencil method but be careful to keep the string always the same length until the six arcs have been drawn.

Now you are ready to color the wheel. Crayons or tempera colors may be used. If your color wheel is a large one, it is desirable to separate the colors with heavy, black lines.

If you make a large wheel you will want to mount it on cardboard or other heavy paper so that it will be more durable. The mounting is the next step.

Next, from lightweight, white cardboard, cut a two-pointed arrow and a triangle. The former should be about five-sixths as long as the diameter of the circle and narrow enough to fit into cone well inside the petals. (See picture at the right.) The triangle should be wide enough to fit as shown in the illustration at the bottom right.

Use paper fasteners to secure the arrow and the triangle to the center of the wheel.

For determining color complements, use the arrow. The opposite ends will indicate the complements. The triangle will show split complementary combinations. Analagous harmonies are those "neighbors" to any specific color. Tints are made by adding white to a color; shades, by adding gray.

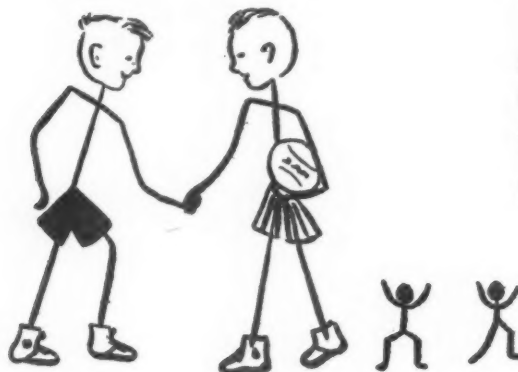
In addition to having a large wheel for classroom use, it may be desirable to have the children make their own, smaller color wheels. These may be placed in individual notebooks and may be referred to not only during the unit but whenever a color problem is presented.

VERSES TO THINK ABOUT

By GAIL BROOK BURKET

WE'RE GOOD SPORTS

We play the game
With might and main;
But if we lose
We don't complain!



WE DO NOT BOAST

And when we win
We do not boast —
The game is what
Should count the most.

WE PLAY FAIRLY

When we play games
we take our turn;
For that is only fair.
There's fun enough
for everyone
When each child has his share.



WE KEEP OUR CITY CLEAN

The world is such a lovely place
We would not mar a bush or tree,
Nor leave a spot less beautiful
Than when we played there happily.



WE CLEAN OUR SHOES

We never overlook
the mats
Which wait in front
of doors;
We leave no muddy
footprints tracked
Across the shining floors.

WE DO NOT SNOOP

We do not open doors
or drawers
To see what can be found;
A little "Snooper" is a pest
Which no one wants
around!



WE KEEP HANDS OFF

We look at things
But do not touch
Although we want to
VERY much.



WE'RE THOUGHTFUL GUESTS

If you invite us to your house
We know what should
be done:
Before we leave
we always say,
"Goodbye, and thank you
for the fun."

TEACHING MUSIC IN THE GRADES

MAKE MINE MUSIC

By LOUISE B. W. WOEPPEL
ASSISTANT PROFESSOR OF MUSIC
DANA COLLEGE
BLAIR, NEBRASKA

Another school year is beginning for the nation's children. Have you planned a music program for your group that will provide entertainment, enjoyment, and information outside of school hours? When favorite diversions are being listed, will many of your class say, "Make mine music!"?

If a school activity is to "carry over" as a leisure pursuit, it must delight and emotionally satisfy the student. This implies not only activity but also progress. There must be opportunities for individual development as well as for group advancement.

The universal need for companionship can be secured by participating with others in the production of beautiful harmonies. However, a well-planned listening program provides another type of kinship which is especially valuable to the dreamer or introvert who may not be able to perform satisfactorily.

Pure or absolute music, with its ability to enchant, inspire, and entertain, may arouse a mood which permits the listener to realize the universality of all emotions among men. Thus he establishes himself as an interested member of a sympathetic society, thereby satisfying his needs for congenial social contacts.

To benefit any group with a wide divergence in musical understanding, many types of music must be provided. Not only the underprivileged child, but his more fortunate classmate deserves an opportunity to develop. If we are to fulfill the obligations of teachers in a democracy, that is, to provide for the development of *all* the group, we must not ignore the needs of the musical minority in our classes.

Any music project should have at least one specific aim: to increase the enjoyment experienced by the group while listening to worth-while music. However, other objectives can and should be realized. The degree of achievement of any goal will depend upon several factors: the interest and aptitude of the group as a whole; the

enthusiasm and the preparation made by the teacher; the amount and type of equipment available; and the amount of time allotted toward attaining each aim.

In general, teachers are keenly aware of the need for developing skill in sight-reading songs. Much of the emphasis in music education has been rightly placed upon this basic training. However, educating children in the art of listening to music is frequently ignored. Many factors contribute to this weakness. Nevertheless, it is possible for a classroom teacher to accomplish a great deal in this field. Let us list some of the points to be considered:

1. Individual differences in musical taste is characteristic of trained musicians as well as laymen. Therefore, we must consider not only the musical background, but the individual preferences of the group when selecting music for listening. Until the tastes of the group have been determined, a wide variety should be played.

2. The musical level of the group may differ widely from their chronological age and grade placement. To determine the "listening level" of her class, the teacher should play several compositions of different age levels. The post-listening comments and the emotional reactions of the children will give her a clue.

3. The teacher should manifest the enthusiasm she hopes to awaken in her group. A great deal of the mob spirit is present in children. They find it easier to accept the opinions of others than to form their own judgments. Incidentally, it is unwise to play a record which you have not heard previously. A standard number may be played by a combination of instruments or written in an arrangement which is not suitable for the classroom.

4. The teacher must be a good listener if she is to train students to be considerate of others. Children are very sensitive to adults around them and absorb attitudes more readily than words.

5. Many persons need external stimuli for their imaginations. This is also true for the appreciation of music. Since active participation, mentally if not physically, is the most enjoyable as well as memorable, a wise teacher will act the scene in every way possible before playing the number.

Frequently interesting anecdotes about the composer may be given before the music is heard. Children are interested primarily in people, not in intangibles. When they associate a lovely melody with an interesting person they will enjoy the music more.

6. The "Listening Hour" should be arranged for a certain period, preferably the last music period each week. This time is not a desirable one in which to begin new work which may be forgotten over the weekend. Children enjoy change and variety.

The end-of-the-week time has other advantages, also. When seasonal music is presented, the class may be urged to "keep their ears open for it over the weekend," and to report their findings on Monday.

7. The students' comments and opinions should be accepted with the same courtesy accorded adults whose views one has asked. When the class realizes that their ideas are respected they will be more likely to comment honestly.

8. The therapeutic values of music should be realized and utilized. Ever since David played his harp to drive away the evil spirit in King Saul, people have sought solace and peace as well as enjoyment in beautiful music.

RECOMMENDED BOOKS FOR THE TEACHER

1. *Making Friends With Music Series*, Grades V-VIII or IX, Ginn and Company.
2. *Music Appreciation For Every Child*, Grade I-VIII, Silver, Burdett and Company.
3. *Music Readers*, Books I-VI and *History Sings*, upper-grade level, by Hazel Kinsella, University Publishing Company, Lincoln, Nebraska.

THE STORY OF PANDORA

By AMY SCHARF

"I am Pandora," and the lovely little golden haired girl standing in the doorway smiled at Epimetheus.

He returned her smile and said, "Then you are the playmate the gods have sent."

She nodded happily. "May I come in?"

"Of course. This is your home now."

And so began the friendship of Pandora and Epimetheus many hundreds of years ago. Both children were orphans and the gods had decided that since neither Pandora nor Epimetheus had a family they should be together. At that time, those many years ago, there was no sorrow, no trouble, no wickedness in the world. Everyone was happy, and Pandora and Epimetheus were especially happy.

However, just before Pandora had arrived, a large box had been delivered to Epimetheus. The messenger who brought it had been very serious and he cautioned Epimetheus: "Under no circumstances must you open the box or allow it to be opened. Will you remember that?"

And Epimetheus had replied, "Yes, I shall remember: I must never open the box or allow it to be opened." Then the messenger had gone and in a few minutes Pandora had arrived.

After their first greetings were over and their friendship firmly established, Epimetheus began to show Pandora the beautiful little house. One of the first things that Pandora noticed was the box.

(Pause here for sketching.)

"What's in here?" she asked, running a finger over the highly polished wood.

"I don't know," Epimetheus replied slowly, and then he told her what the messenger had said.

Pandora frowned when she heard it. "That sounds very stupid! What could

possibly be in it?" She peered down at the shining, polished wood as if she were trying to see through it to what was inside. "Oh well," she said, turning away, "I really don't care anyway. Come," and she smiled and took his

NOTE ABOUT THIS FEATURE

This is the first in a series of stories based on famous stories, myths, and legends to be presented this year. During the course of the year all three grade levels—primary, intermediate, and upper—will be represented.

These stories serve a double purpose. First, they can be used simply as stories to be read to (or by) the class to enrich the children's literary background and experience. Second, they can be used to stimulate illustrative and creative drawing.

It will be noted that at several points in the story the words "Pause for sketching" have been inserted. At these points the teacher should stop reading and ask the children to draw their ideas of the event or scene just preceding. These drawings may be rough sketches to be completed later, or they may be finished before the story is continued.

Also, the facts that dioramas and murals of the stories can be made and that other art experiences in the use of various media are possible, should not be overlooked.

We shall be interested to have your comments and suggestions and experiences with this new series.—Editor

hand, "show me the rest of my new home."

For many days they played happily together. But more than once Pandora found herself wondering about the box. She would go over to it and stare at herself mirrored in its highly polished surface. She would run her fingers along the edge of the box around to the small clasp. But then she would remember what Epimetheus had told her: under no circumstances should anyone open the mysterious box. She would turn away then and try to forget about it.

(Pause here for sketching.)

"But I just can't forget about it," she said to herself one day when Epimetheus was out in the garden. She walked over to the box and stared down at it again. But the face she saw reflected there seemed not to be her own. It looked like her and yet it didn't, for the mirrored face was smiling and Pandora was not, and the mirrored face seemed to be saying something and Pandora's lips were closed. She thought that she heard a voice saying, "Open it, open it, open it," very softly, very insistently the voice repeated the words.

"Oh, no," Pandora thought, "I must not open it."

But the voice kept repeating, "Open it, open it, open it."

Then suddenly Pandora said, "Very well, I will open it. Epimetheus is

being silly, and so was the messenger who brought this box. There are probably toys and games and lovely clothes in it." And without hesitating further Pandora undid the clasp and raised the lid.

As soon as she did so she cried out for Epimetheus and fell back on the floor. For swarming out of the box came a huge black cloud of ugly winged creatures making shrill, harsh laughing noises. The whole room

seemed to be filled with the terrible things which stung Pandora and then Epimetheus when he came running in in response to her cry.

(Pause here for sketching.)

"Pandora, Pandora, where are you?" he called as he tried to fight his way through the swarm.

"Over here," she sobbed. "Oh, Epimetheus, I opened the box, and look what has happened!" By that time the room had cleared out a bit. The black stinging creatures had begun to fly out the door and the windows into the world outside.

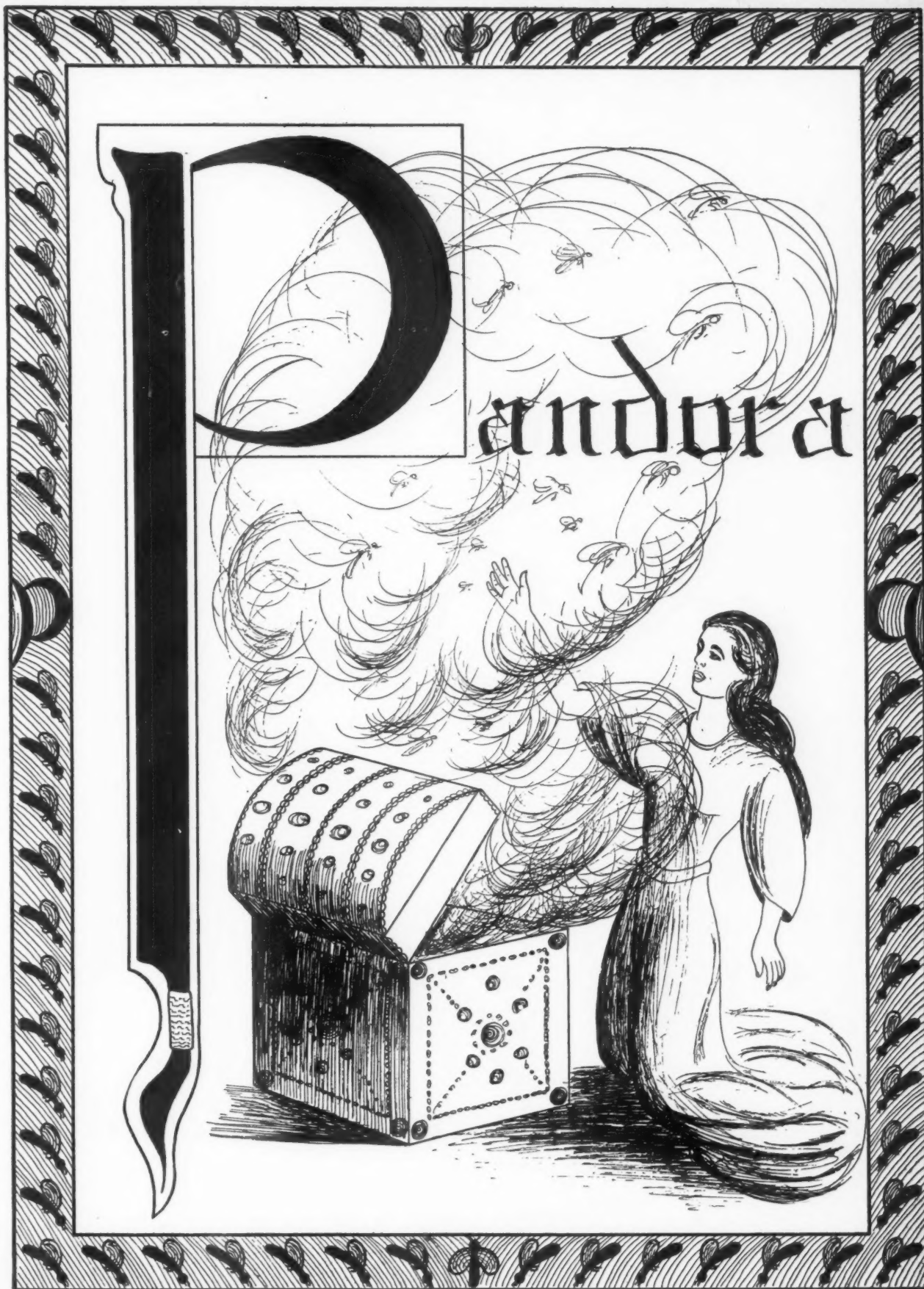
Sorrowfully, Epimetheus tried to comfort Pandora. "It was wrong of you to open the box, Pandora; but now that it's done there is nothing we can do."

The heartbroken girl continued to cry until suddenly they heard a faint tapping inside of the box and a musical voice entreated them, "Children, let me out."

"Oh no," Pandora was terrified, "it's another one. We mustn't open the box again."

"Please," the voice pleaded. "I am

(Continued on page 42)



SEPTEMBER BLACKBOARD DECORATIONS



Decorate your classroom this month with patriotic reminders of the founding of our nation. Constitution Day (September 17) affords an excellent opportunity to discuss the principles on which the American government is based and these discussions will be stimulated if a creative project is in progress.

We have shown some of the designs which the class may work out for blackboard borders, window decorations, and the like. These are merely suggestive. Silhouette pictures of Washington, Jefferson, Hamilton, Madison, Monroe, and other statesmen who drafted our constitution can be worked out nicely. For example: each child might choose one man, find a picture of him and from that sketch an outline. When this is completed to the child's satisfaction, it may be traced in chalk on the blackboard, the pattern removed, and the outline

filled in with white chalk. Then beneath the silhouette a few facts about the man may be written by the child. In this way the blackboard design becomes functional to the study and a good motivating force is given for pupil research.

The same idea may be carried through with such pictures as we have shown on this page. For example: the town crier announcing some event (bottom left) may be used. The legend beneath the picture may tell about the need of town criers and something of their duties, thus including an investigation of some features of the life of the young republic in addition to the historical facts. Flags with the thirteen stars and thirteen stripes may be drawn and explained.

The pupils may have other ideas and suggestions. These should be incorporated into the study.

ACTIVITIES IN WOOD

By JEROME LEAVITT

KITCHEN ACCESSORIES

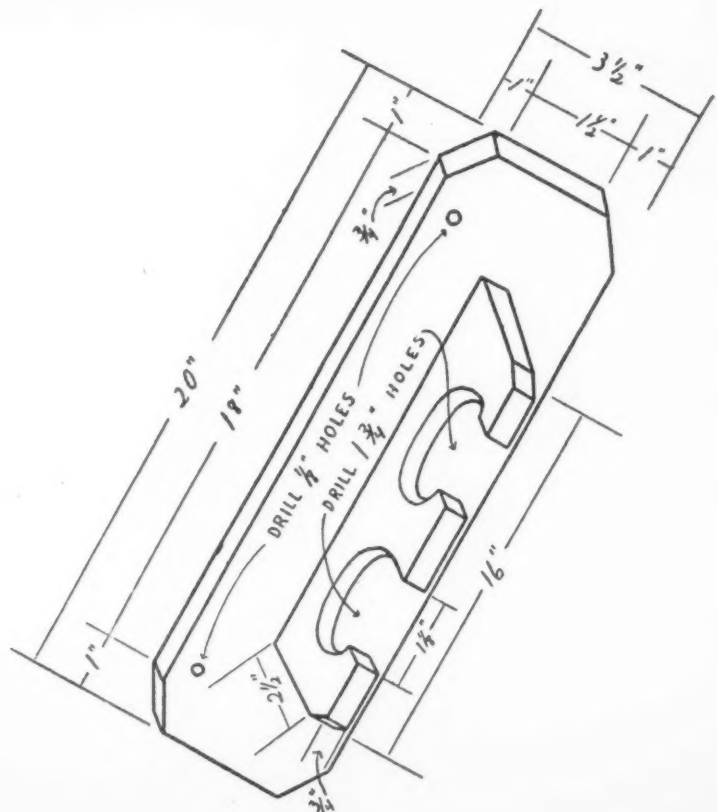
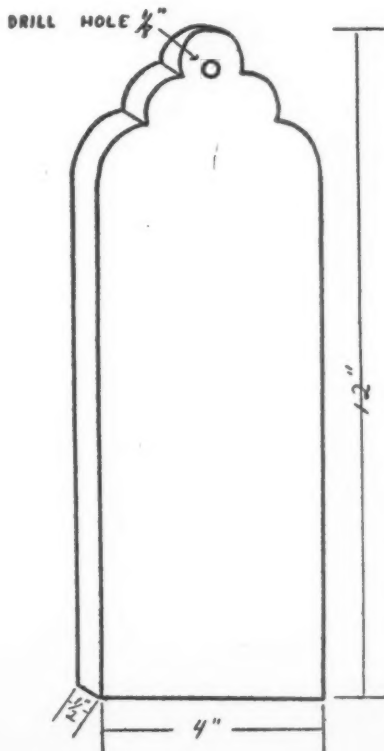
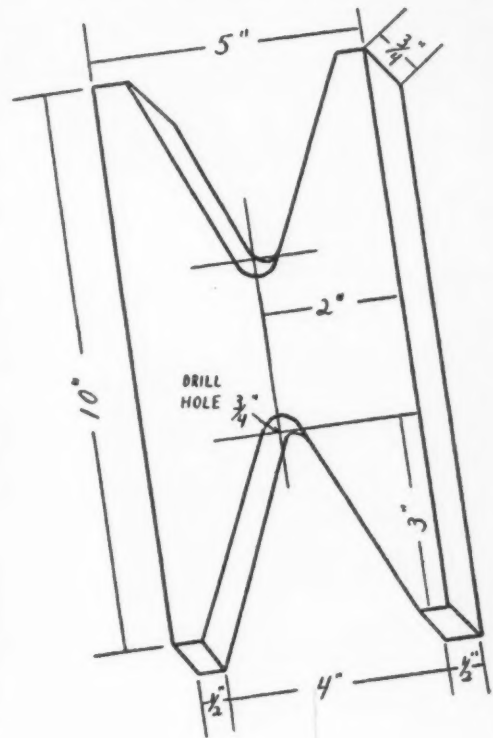
PROJECT 1 — LINE WINDER. To make this clothesline or cord winder, the pattern is drawn on a piece of paper according to the dimensions and cut out. Next it is folded once horizontally and once vertically; then trimmed. This reveals any defects in the symmetry of the pattern. A three-quarter-inch piece of pine or similar wood should be secured and the pattern traced on this.

After the pattern is traced, the student should drill the two three-quarter-inch holes with an auger bit and brace. Then the main outlines and the "V" slats are cut off with a hand saw. When this is finished, the winder should be smoothed with a piece of sandpaper.

PROJECT 2 — CUTTING BOARD. This small cutting board or bread board is made of any clean, clear wood one-half inch thick, four inches wide, and twelve inches long. A design is drawn on one end and cut out with a coping saw. A one-eighth-inch hole is drilled in the center of one end to facilitate hanging up.

PROJECT 3 — TWIN BROOM HOLDER. The twin broom holder requires two pieces of wood: one for the back and one for the support. The back is cut from a piece of wood three-quarters of an inch thick, three and one-half inches wide, and twenty inches long. The one-inch triangles are cut off each corner. One-eighth-inch holes are drilled in the back, as shown, for hanging.

The support is also made from three-quarter-inch wood that has good, straight grain. It is cut sixteen inches long and two and one-half inches wide. Two one-and-three-quarter-inch circles are spaced on the support with channels leading to them. These are cut out with a coping saw so that they resemble the illustration. Both pieces are sandpapered smooth. Glue is placed on the back of the support which is spaced evenly with a ruler onto the back. Finally, nails are driven from the back into the support. The twin broom holder may then be painted any color desired.



URANIUM

A SCIENCE UNIT

FOR UPPER GRADES

INTRODUCTION

It is obviously impossible for children to attempt a detailed study of uranium and its uses today in the atomic bomb. However, because this element now figures so prominently in our lives, and since, according to science, we have left the electron world and live in the nuclear world, it is desirable that they have some knowledge of uranium. For additional information and more comprehensive treatment of the subject, teachers should be alert for material about uranium in current periodicals.

I. WHAT IS URANIUM?

Uranium, in pure form, is a lustrous white metal, a radioactive element of the chromium group. Its symbol is U; its atomic number is 92; its atomic weight is 238. It is slightly paramagnetic, and it is malleable, that is, capable of being shaped.

Uranium exhibits marked chemical activity in that it burns readily in oxygen and it reacts vigorously with the halogens (any element of the chlorine family). It is the element (so far as is known) of the highest atomic weight and number.

Studies of radioactivity (initiated by investigations of Henri Becquerel, a French physicist) showed that uranium continuously undergoes atomic disintegration. That is, when an atom of a radio-active element blows up and releases some of its energy, it forms a new and entirely different atom of an element of less mass. In this way uranium turns into radium, radon, polonium, and eventually lead. Of course, this is a very slow process. In about $4\frac{1}{2}$ thousand million years uranium is about half through its disintegration.

As we know, uranium has come into general public notice because of its importance in the atomic bomb. However, it is isotope (isotopes are substances which, though they have different atomic weights, yet have identical chemical properties and occupy the same place in the periodic table of the

elements) uranium — U-235 — which is utilized by modern science in the atomic bomb or nuclear fission. Only 1/140 of ordinary uranium is U-235, and it is very difficult to separate from U-238.

II. BY WHOM WAS URANIUM DISCOVERED?

Martin Heinrich Klaproth, leading chemist of his time in Germany, discovered uranium in 1789. (He also discovered zirconium, cerium, and titanium.) He was the first to characterize it as a distinct element. However, Klaproth did not obtain uranium, or any of his other discoveries, in their pure metallic state. It was Peligot who actually isolated the element uranium in 1841. Klaproth named uranium in honor of Herschel's discovery of the planet Uranus.

III. WHERE IS URANIUM FOUND?

The two principal commercial ores in which uranium is found are: 1. pitchblende (or uraninite) 2. carnotite.

There are pitchblende deposits in: Cornwall (England), in Russia, in Sweden and Norway, in the United States, and at the St. Joachimsthal Mines in Czechoslovakia (these mines have been worked since 1517). In Canada, a few miles south of the Arctic Circle at Cameron Bay on Great Bear Lake, are located the most recently discovered (within the last 20 years) pitchblende mines. Katanga in the Belgian Congo also produces pitchblende. These last two deposits named are the most important.

These mines were operated primarily for the extraction of radium, which as we stated in section I., is a product of uranium decay, or uranium's atomic disintegration.

Carnotite, the other ore from which uranium is extracted, occurs principally in sandstone deposits, especially in western Colorado; other deposits have been found in South Australia and Portugal.

New deposits of the uranium ores have probably been discovered since the war, and because of uranium's new importance there will undoubtedly be an intensive search to discover more deposits.

IV. WHAT ARE THE USES OF URANIUM?

Compounds of uranium have been used in coloring porcelain and glass. Uranium salts have been used in photography, and uranium can replace tungsten in high-speed steel.

However, we are concerned today with uranium as it is used in the process of nuclear fission, upon which the principle of the atomic bomb is based. This is, by necessity, only the most elementary explanation of the process.

As we stated in section I., U-238 must be changed to U-235. This difficult task is accomplished in a number of ways, however, the most practical is a process of gaseous diffusion.

U-235 undergoes fission and in doing so produces neutrons which are used as ammunition to bombard U-238. When this is done, plutonium, or element 94 (man-made), is produced. Plutonium is considered stable. However, when it is bombarded by neutrons it actually blows itself to pieces, splitting into atoms of smaller atomic weight and producing huge amounts of energy. This process is called nuclear fission, which is the principle of the atomic bomb.

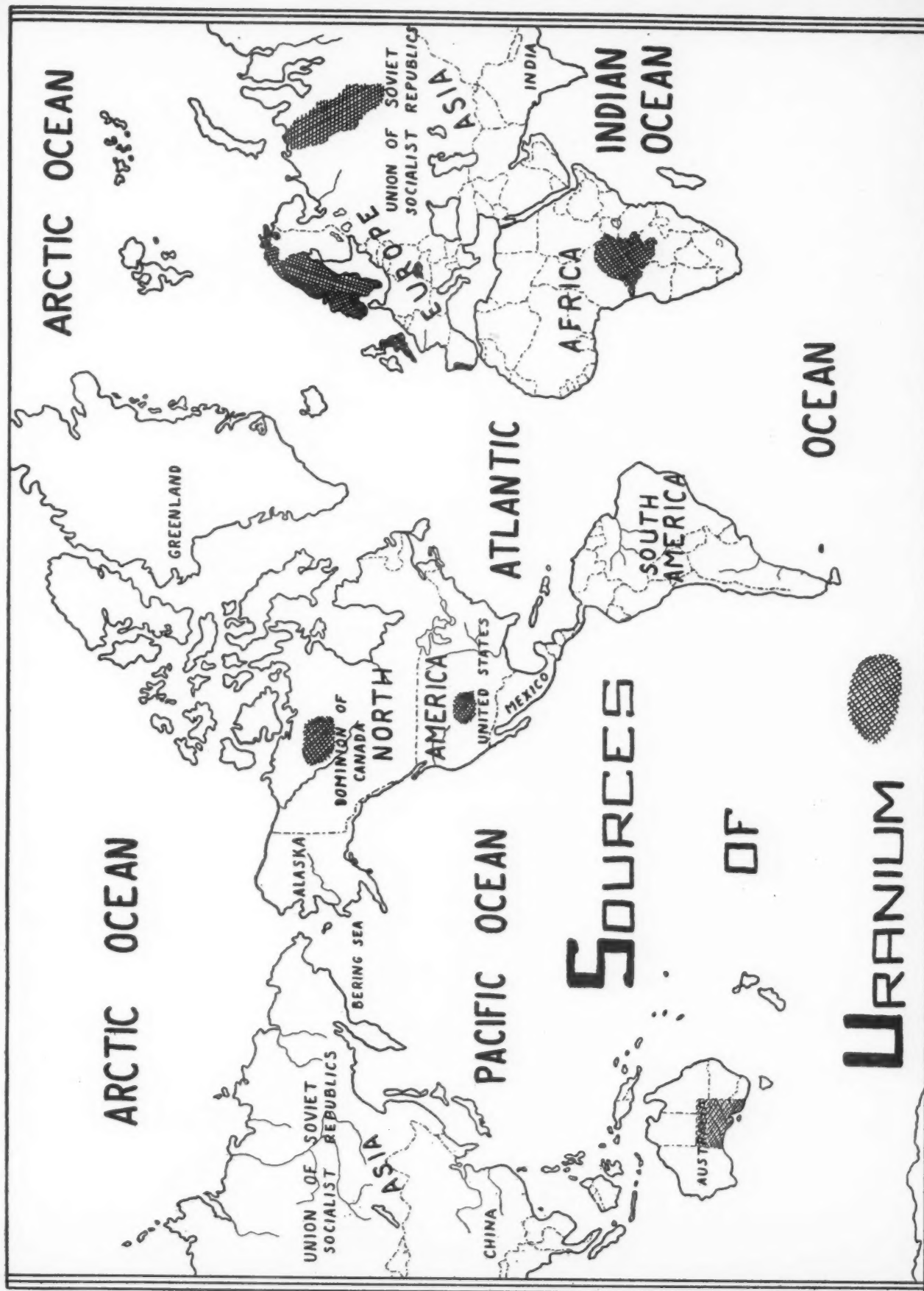
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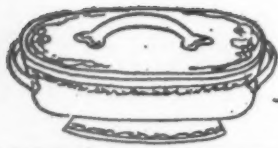
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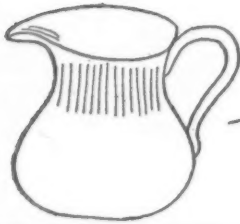
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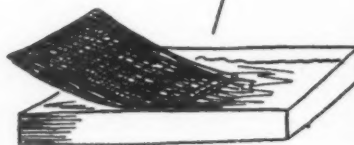
COLORING PORCELAIN



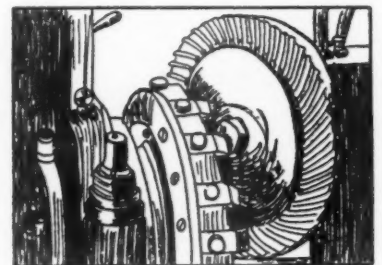
COLORING GLASS



ATOMIC BOMB



PHOTOGRAPHY



HIGH-SPEED STEEL

Symbol U
Atomic number 92
Atomic weight 238

JERRY TAKES A FALL

A STORY

By GORDON M. PETERSON

Jerry Duck sat on his stone in the Big Pond and wished that he were a big duck so that he could do something important. It was awfully dull to be only three months old and have nothing to do except watch Mr. Heron.

In front of Jerry, in the shallow water at the edge of the Pond, Mr. Heron was fishing for his dinner. Jerry thought that Mr. Heron was a very silly bird, standing on his long legs and looking down into the water for minnows and tadpoles.

When a fish got too close, Mr. Heron's long neck whipped down quickly and his head splashed into the water. Sometimes, when his head came up out of the water, he would have a fish in his bill. But most of the time he didn't catch a thing. And when that happened Jerry would laugh at him noisily until Mr. Heron's feathers stood almost straight up.

Mr. Heron thought Jerry was a very noisy and bad-mannered little duck, but he didn't scold him because Mr. Heron was very old and very wise. He knew that Jerry was just growing up and that he would have to learn the hard way that little ducks who believe that they are very clever don't have an easy time getting along.

Jerry soon grew tired of watching Mr. Heron, and he stood up on his stone to yawn and stretch his wings. Freddy and Frank Otter were swimming down to the end of the Pond, and they saw Jerry standing on his stone. Freddy Otter looked over at his brother Frank. "How about asking Jerry to come sliding with us, Frank?"

Frank shook his head. "Aw, no," he said, "he's no fun. He thinks he's too smart."

"But we don't really want to go alone," Freddy said. "Let's swim over and ask him anyway."

"All right," Frank said, "but it would serve him right to let him sit there alone."

They swam over to Jerry's stone very quickly because otters learn to swim almost as soon as they can walk. They look like small, shiny, brown puppy-

dogs, and they have long tails. When they swim all you can see is the tips of their noses and the ends of their tails.

When Frank and Freddy got near enough to Jerry, Freddy yelled, "We're going sliding down at the end of the Pond. How would you like to come along?"

Jerry looked at them sleepily. "What can we slide on?" he asked.

"We made a mud-slide down the bank over at the end of the Pond," Freddy replied. "It's a lot of fun. You go right down the slide into the water."

Jerry was really interested in sliding, but he wanted to be coaxed so he said, "Sliding is baby stuff."

But Frank Otter answered, "I think you're just afraid to try it, Jerry Duck!"

Jerry jumped into the water with a splash. "I'll show you who's afraid," he said. "I'll show you how to really slide!"

Freddy and Frank led the way to the slide. Jerry swam as hard as he could but he couldn't keep up with them. "Just wait until I get bigger," he puffed, "I'll be able to fly then and I'll fly circles around you." Freddy and Frank only laughed and played in the water while they waited for Jerry to catch up with them.

When they got to the slide Freddy and Frank scrambled up the bank and waited for Jerry to climb to the top. "We just lie down on our stomachs at the top of the slide and down we go!" the Otters explained. And Freddy and Frank scooted down the slide into the water.

It looked very easy to Jerry as he walked up to the top of the slide and sat down on it. But as he looked down toward the bottom it seemed awfully steep so he held on with his feet to keep from going down. Freddy and Frank were making fun of him he knew, because they giggled, but though Jerry was ashamed to be frightened he was just too afraid to let go.

Then, one of his feet slipped and he started down the slide, faster and faster. He tried to hold on but that tumbled him head over tail so that he rolled all the way down the slide and splashed into

the water upside down. When Jerry got back to the bank Freddy and Frank were rolling on the ground they were laughing so hard.

Jerry was miserable. He had bragged so much about how he would show Freddy and Frank how to slide. And now he couldn't slide at all. He was so ashamed of himself that he almost began to cry.

Mr. Heron had been watching the sliding while he fished in the shallow water near the bank. He thought that Jerry had learned a lesson and was sorry that he was so unhappy. Mr. Heron waded over to the bank where Jerry stood and said kindly, "Perhaps you are just trying too hard, Jerry. Why don't you try it once more and I'll tell you how you can do it."

Jerry looked up at him sadly and remembered how rude he had been when Mr. Heron was fishing. "All right," he said very quietly, "I guess I don't know as much about it as I thought I did." And he went to the top of the slide again.

"That's fine, Jerry," Mr. Heron said. "Now, this time just sit down and hold your feet out in front of you. Are you ready?"

"Yes, Mr. Heron, I'm ready," Jerry called.

"Now," said Mr. Heron, "just close your eyes and let go." So Jerry let go and he slid smoothly to the bottom and scooted out over the water. Jerry quacked happily as he swam back to the bank.

"Oh, that was wonderful!" he exclaimed.

Freddy and Frank Otter stopped laughing then and told Jerry that he had done better for the first time than they had, and that he was a good duck to go sliding with.

While Jerry was waiting for his next turn on the slide he saw Mr. Heron walking away to start fishing again. He remembered what Mr. Heron had done for him and so he went over to the bank to tell him thank you. Jerry decided that Mr. Heron was a very kind and wise old bird, and he, Jerry, would never make fun of people again.



A MIGRATING BUTTERFLY—BUTTERFLY DESIGNS

By I. DYER KUENSTLER

Many children know that certain kinds of birds migrate south for the winter, but they may not realize that some butterflies also travel south at the first sign of frost. The Monarch is perhaps the most famous traveler. In the fall swarms of Monarchs congregate in trees on the shores of Lakes Erie and Ontario, in New Jersey, and in other parts of the United States where milkweed is plentiful. On a cool, clear day they start south. Their numbers increase as they advance until they become a long orange-colored cloud.

One of their winter resorts is a certain group of pine trees on the Monterey Peninsula, California. Here they gather by the hundreds. Butterfly hunters are

prohibited by law from catching or molesting these butterflies.

THE STUDY OF LIVE CATERPILLARS

Any live caterpillar makes an interesting study for classroom, but you may consider yourself fortunate if you find a Monarch caterpillar, Fig. (1), for it turns into a beautiful chrysalis that looks like a pale green, shiny china ornament studded with tiny gold nails and decorated with black spots, Fig. (4).

Look for Monarch caterpillars on the milkweed plant. Their white skins are decorated with orange and black stripes and long black horns wave from their heads and tails.

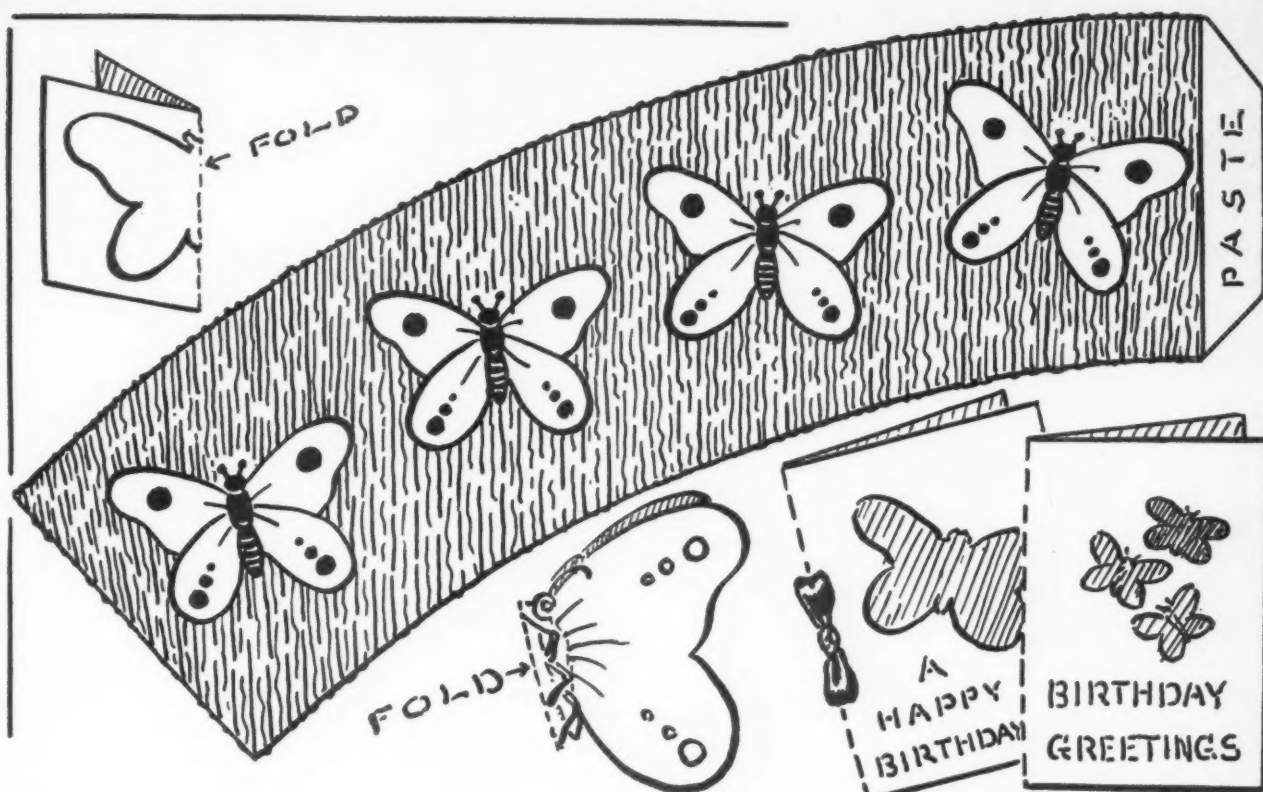
CARE OF CATERPILLARS

Do not handle caterpillars with your fingers. They are easily bruised and hurt, besides a few of the hairy ones may cause a rash to appear on your skin.

When you go on a caterpillar hunt, take a cardboard box along with you, with small air holes punched in the sides. If you find a caterpillar, break off the leaf or twig which it is eating and drop it carefully into the box, caterpillar and all.

CATERPILLAR CAGES

Keep your worms in cardboard shoe boxes with air holes punched in the lid



or sides, or cover the box with mosquito netting. Each different kind of caterpillar should have a separate box.

Place fresh food into each box daily, and let the caterpillar crawl onto it. Then remove the old leaves and the dirt. If the boxes are not kept clean they may develop an unpleasant odor.

FOOD

Although a caterpillar is a very hungry creature, it will refuse to eat any kind of leaf except that which it has eaten since it hatched out from the egg. The caterpillar of the Cecropia moth is found on box elder, apple, and several other trees; but if it was hatched out on an apple leaf it would rather starve than learn to eat box elder.

When you find a caterpillar, notice what plant or tree it is eating. Gather several of the leaves and take them home with you. Place the stems in water to keep the leaves fresh until the caterpillar needs a new supply.

NEW SUITS

As a caterpillar eats and grows, its skin soon becomes too tight. Then it stops eating for awhile. Suddenly its old skin cracks open and the worm crawls out wearing a new, bigger one. As a rule it changes its skin three times during its short life.

Beware when your caterpillar becomes restless and hurries all over the box. It is ready to turn into a chrysalis

and it may escape for it is looking for a suitable spot to make the change.

As you may not know if it will turn into a moth or a butterfly, provide desirable spots for both kinds of caterpillars in a large glass jar. Air holes should be punched in the lid. Place two inches of soft earth on the bottom and scatter dead leaves over the earth. Also, place a twig with leaves on it in the jar. Then coax your caterpillar inside and screw on the lid.

As a rule, future butterflies hang themselves up to some twig, and future moths spin cocoons, or bury themselves in the earth, or make a cocoon of leaves and earth at the surface of the ground.

The Monarch caterpillar hangs himself upside down from a silken button, Fig. (3). He may hang this way for two days, then he will change into the shiny chrysalis shown at his side, Fig. (4). The Swallowtail caterpillar hangs himself up to a twig, Fig. (7) and changes into the queer brown chrysalis at the right. Caterpillars of Swallowtail butterflies are found on fennel or carrot greens.

Caution. After a caterpillar has hung itself up, do not shake the jar or you may kill the worm.

The hatching time varies. Some butterflies remain in the chrysalis state until the next spring, but a Monarch chrysalis usually hatches out in 12 days. When the wings show through

the case the butterfly will soon break the skin at the bottom and crawl out, Fig. (8).

Note. When a moth or butterfly hatches out, immediately see that it has room for its wings to expand or they may become dwarfed and the creature will not be able to fly. As newly hatched moths and butterflies will not attempt to fly for one or two hours, let them crawl out of the jar immediately upon hatching. See that they run up a twig or the side of a box. When settled, they will start to pump the juice from their fat bodies into their crumpled wings. You will be able to watch them grow.

The Monarch butterfly in Fig. (6) has been hatched 15 minutes. Its wings are full grown but they are too wet to use for at least an hour.

SIMPLE DESIGNS BASED ON BUTTERFLIES

Flowerpot decoration. Cut a strip of colored or crepe paper to fit a medium sized flowerpot, probably about twice the size of the sketch above.

Draw the simple outlines of one-half of a butterfly on a folded sheet of paper of contrasting color, and cut out around the edge. Open up the butterfly and paste it on the long strip. Make enough butterflies to go around the pot. If desired, ask different children to cut

(Continued on page 42)

PROGRESSIVE ART IN PROGRESSIVE SCHOOLS

SOURCES OF ART AIDS FOR TEACHER AND PUPIL

By HAROLD R. RICE
HEAD, DEPARTMENT OF GRAPHIC AND PLASTIC ARTS
PROFESSOR OF COMMERCIAL DESIGN
UNIVERSITY OF ALABAMA

This article is written to give the teacher further understanding of the fine arts and to aid her materially in sharing these experiences with her children. Suggestions made in articles of this nature enrich activities that originate in the classroom; however, they can never be considered as lesson plans designed for every situation, because individual personalities must be considered. If the reader uses these suggestions otherwise, the very essence of the underlying philosophy is lost and an artificial situation results.

INTRODUCTION

Methods of obtaining art materials vary widely with the individual community. In the larger communities most art materials are usually purchased by a purchasing agent, stored in a central supply center, and distributed to the various departments through a requisitional system. A number of smaller school systems follow a similar plan, but in most instances the teacher in the small or rural system assumes the responsibility of obtaining materials as part of her teaching duties. Some teachers pool the available funds and purchase their classroom needs a year in advance. Others place the responsibility upon the child who makes his purchases from time to time from a local merchant. It is obvious that there can be no ideal plan applicable to every situation, nor does any one plan escape certain obvious objectionable features.

It is not the purpose of this article to propose a plan for the teacher to follow in obtaining needed materials. Instead, a number of suggestions are made, sources disclosed, and aids projected, with the hope that every teacher will realize some benefit regardless of the structure of the materials and supplies plan operating in her particular school system.

FREE PERIODICALS

A number of manufacturing and distributing concerns prepare and distribute free material of interest to art teachers. It is advisable to use official school stationery when writing to request such materials, as the quantity of such free

literature is necessarily limited to those actually engaged in teaching or those who have active posts in connection with the promotion of education. While it is impossible to give a complete list of free materials, the following items will be of interest to a number of teachers:

Everyday Art—a colorful and profusely illustrated booklet that is issued every two months during the regular school year by The American Crayon Company, Educational Division, Sandusky, Ohio.

The Drawing Teacher—a neat folder that offers units of work for both the primary and the elementary grades is published by the Binney and Smith Company, 41 East 42nd St., New York 17, N. Y. Comments on the various happenings in art and art education are included in each issue. The publication is issued every other month.

Creative Ideas—a timely quarterly devoted to helping creative leaders of all age groups, this service is published by the Universal Handicrafts Service, Inc., 1267 Avenue of the Americas, New York 19, N. Y.

INEXPENSIVE AND FREE INSTRUCTIONAL AIDS

Many of the catalogues issued by manufacturers and distributors are supplemented with most helpful suggestions that are to be followed in connection with the use of the products described in the catalogue. Outstanding examples of such catalogues are those of Binney and Smith Co.; Devoe and Reynolds Co., Inc., 44th St. and 1st Ave., New York 17, N. Y.; B. F. Drankenfeld and Co., Inc., 45-47 Park Place, New York 7, N. Y.; Fellowcrafters Inc., 130 Clarendon St., Boston 16, Mass.; Industrial Arts Cooperative Service, 519 W. 121st St., New York 27, N. Y.; and The O. P. Craft Co., Inc., Educational Division, Sandusky, Ohio.

Separate instruction sheets and folders are also available. Frequently these are sent free upon request, and none of the aids supplied costs more than a few

cents charged to cover paper, printing, and mailing costs. Such materials are numerous. Sherwin Williams Co., Brown St. and Lister Ave., Newark, N. J., offers a number of booklets on color. Higgins Ink Co., 271 Ninth St., Brooklyn 15, N. Y., markets a series of instruction booklets on the uses of inks in crafts projects. Dennison Crepe Paper Co., 5th Ave., New York, N. Y., has a series of paper craft booklets retailing at 10c each. C. H. Hunt Pen Co., of Camden, N. J., issues a series of instruction sheets on block printing. Spencer Wood Products Co., Spencer, Ind., suggests many clothespin crafts in a circular on wood crafts. A. S. Boyle Co., 1914 Dana Ave., Cincinnati, Ohio, manufacturers of plastic wood, explain a novel approach to puppetry in an available circular.

Diamond Tints and Dyes of Burlington, Vermont, offers a wide array of circulars on such subjects as "Fabric Painting," "Tie-Dyeing," "Batik," and "Modern Color Magic." Requests for these free pamphlets should be directed to the attention of Miss Mae Martin, Color Consultant.

Many attractive articles made from colored shoe laces are illustrated and explained in every detail in a series of booklets published by Mitchellace Inc., Portsmouth, Ohio, manufacturers of a wide variety of shoelace material.

Lily Mills Company of Shelby, N. C. have a complete line of hand weaving yarns in all sizes and types. Samples, price lists, and aids are available without cost upon request.

A number of government publications made available at cost are listed in price list No. 31, *Education*, a free publication issued by the Superintendent of Documents, Government Printing Office, Washington, D. C.

MAGAZINES

In addition to *Junior Arts and Activities*, at least two other educational magazines dealing with art, and art education should be included in the teacher's professional reading. The first

of these is *School Arts*, published by the Davis Press, Inc., Printers Bldg., Worcester 8, Mass. It is a magazine devoted exclusively to art education. A second and equally as fine a publication is *Design*, published by the Design Publishing Co., Columbus, Ohio.

ILLUSTRATIVE MATERIALS

Many teachers build files of illustrative material and similar aids. Such material, uniformly mounted and properly filed, is almost a prerequisite to successful teaching. While most teachers maintain their own individual files of materials, in a number of instances teachers have built up a supplementary library of illustrative material that is centrally located in the school building, usually in the library, and teachers and students alike of all the grades of the school have access to the complete files. The latter plan eliminates duplication and wasted effort, cuts cost, and above all, serves a much larger group of individuals.

While the various major headings used in the filing of materials will vary with the individual teacher, the following may be of some assistance to those facing the preliminary steps necessary in creating a subject matter filing system. The suggested headings are broad and most general, and a number of sub-headings will be needed under each of the master titles suggested.

Animals, art appreciation, basketry, birds, block prints, boats, books, color, costume, crafts, design, flowers, formulas, furniture, gardens, holiday material, houses, human figures, illustrations, insects, landscapes, leathercraft, lettering, maps, metal crafts, modeling, murals, nature study, picture study, posters, pottery, printing, puppetry, sand-table units, seasonal materials, sewing, soap crafts, stagecrafts, stenciling, textile decoration, toys, units of work, unclassified, weaving.

A number of concerns offer special portfolios of excellent illustrative materials in many of the above mentioned areas. Perhaps the largest selection of such portfolios is offered by the Davis Press, Inc., Worcester 8, Mass. Do not fail to note the many valuable aids offered by *Junior Arts and Activities* advertised elsewhere in this issue.

CATALOGUES

Perhaps the best way to obtain a knowledge of the many available materials in the art area is through a constant study of the various catalogues issued by the leading manufacturers and distributors. Several magazines publish an annual directory of art and crafts supplies. A number of interesting cata-

logues are announced in advertisements in *Junior Arts and Activities* and other publications. Teachers should select at least one manufacturer of each of the various art media, materials and supplies, and should ask to be on their mailing lists to receive all of their catalogues. In this manner, the teacher can keep abreast of the developments in the art field and at the same time have source material on hand at all times so as to enable her to order her needs promptly and efficiently.

WORKSHOPS

Several of the major manufacturers of art materials conduct workshops within the schools throughout the country upon request for this service. These workshops are conducted without cost to the teacher or the school. Such services are in great demand and most companies are already booked well into their 1947-48 season. Included in the concerns offering workshops are: the

American Crayon Company and the Binney and Smith Company. Further details concerning these workshop services may be obtained by writing to either or both concerns, care of *Junior Arts and Activities*.

EXHIBITS

A number of excellent exhibits of students' work are available at little or no cost. An outstanding exhibit of work done by students in each teacher's respective state may be obtained by writing to Scholastic Publications, 220 E. 42nd St., New York, N. Y. In addition, Scholastic Publications exhibits annually a national show of the nation's outstanding and prize-winning work done by high school students. A number of these prize-winning paintings are reproduced annually by Ingersoll Division of Waterbury Clock Co., 60 E. 42nd St., New York, N. Y., and a calendar with these reproductions is available without cost to schools requesting one. The Binney and Smith Company offers two services: (1) A selected group of paintings, designs, and illustrations entered in their annual "Young America Paints" competition. These may be borrowed for display in public schools. (2) Two films, silent or sound, finished in full color, that may be borrowed for a very small service fee.

An unusual exhibit of craft materials, including stenciled and block printed textiles, is available from the American Crayon Co., under similar arrangement.

CONVENTIONS

An integral part of a teacher's professional growth is faithful attendance at art conventions. Included in the large annual gatherings of importance are Southeastern Arts, Eastern Arts, and Western Arts. Such meetings make it possible for teachers to not only see many timely demonstrations and hear formal and informal talks and discussions of timely art subjects, but gives them an opportunity to see the nation's finest display of art materials, supplies, and aids grouped for their convenience at the convention headquarters.

CONCLUSIONS

The progressive teacher finds herself more adequately prepared to share rich and fruitful art experiences with her children when she is alert and open to the many opportunities that are about her. She should make every effort to use the many aids that are at her command. In this way the teacher will find that life holds an inexhaustible storehouse of untold wealth in happy and enriched experiences awaiting those who seek them.

THE POINT OF VIEW

If crickets carried carpet bags

To keep their fiddles dry;

If humblebees put bonnets on

When they went out to fly;

If butterflies brought butter home

Just as bees bring honey;

Do you not think such goings on

Might seem a trifle funny?

If each cat wore a fancy hat,

And owls sang comic operas;

If squirrels rode on bicycles,

Or they wore high silk "toppers,"

(as

They might, if they were so inclined);

Though we might laugh unduly, are

You sure we should? *We* do such things,

Yet don't think them peculiar!

"My, my!" I think I hear *them* say,

"What strange ways human folk have got!

"They don't do things our way at all.

"They are a queer and funny lot!"

—Alfred I. Tooke

A GREENHOUSE IN THE CLASSROOM

FOR THE PRIMARY GRADES

By MARY DOYLE
"LINCOLN SCHOOL"
MERRILL, WISCONSIN

In reality, our greenhouse unit began on the opening day of school when the first flowers and plants were brought into the classroom. It ended in May when the last little window box was taken home.

To have the opportunity of opening a child's mind to all the loveliness that is in plants, flowers, and birds is one of the most delightful of all the privileges given to a teacher of little children. The success of first attempts to open this new world to children will depend a great deal on the amount and kind of experience that has been a part of their early background. However, before we attempt to arouse appreciation in children, it is necessary that we ourselves have a sense of appreciation of the loveliness of nature. When flowers, seeds, twigs, bulbs, and plants were brought into our schoolroom, special attention was given to them. The second day of school one of the boys brought two plants from home. He remembered that the name of one plant was petunia, but he could not remember the name of the other. Turning to me he said, "My big brother said you would know what it is." The plant was a fuchsia.

Due to the interest aroused, many more plants were brought in by the children. We placed the plants on a shelf in the east windows. Bouquets of fall flowers were put on the piano, bookcases, and my desk. This added to the attractiveness of the room and brought such responses from the children as: "That makes the room look pretty," or "I like the red flowers best."

As time went on a large variety of new plants was added to our shelf and these were cared for by the children who took turns being gardeners. This was one of their "civic responsibilities."

After a while our attention was given to new leaves, blossoms, and the growth of the plants, especially that of an ivy which grew up the side and over the archway between our two rooms.

We nipped the new leaves at the top of the foliage and found that by doing this the plant became more bushy. Sometimes we took slips from the plants, placed them in water, and watched the little white rootlets through the clear glass as they grew. We planted these from time to time until we had quite a collection. Soil and small rocks had been brought for this purpose earlier in the fall.

We were fortunate to have a little girl in our class who lived at a "real" greenhouse. It was amazing how much she knew about plants.

Our shelf became crowded and the next question was: What can we do with our collection? This brought from the children the idea that a greenhouse was needed.

Before building the greenhouse, the class discussed many points of interest such as: how a greenhouse looks (there were two in our locality so situated that every child could visit one or the other with his parents); how large a greenhouse was needed; what kinds of windows and roof were needed.

The group divided itself into committees. A chart of these different committees was printed on the board. Our building committee put the large house together using the long boards and blocks which made the framework. They allowed for three windows and a door. One committee chose to put large cellophane on the roof to represent the glass. This was held in place by transparent tape. Orange crates, arranged along two sides with ends up and boards nailed to them, was the work of another committee. This framework was covered with long sheets of white paper to imitate the whitewash on the greenhouse in the city. White shelf paper was placed on the long boards and the plants were arranged on these. The painting committee painted laths, cans for flower pots, and bottles for vases. They stained shelves of basswood to hold the pots and vases. When the

laths were ready for use, another committee, called the measuring committee, made the framework for the sides. Two laths were placed on the floor a yard apart. Small nails were put at one end of each lath connected by a string a yard long the ends of which were tied to the nails. Next the boys measured on each lath a foot from the first nail and drove two more nails connected by a string a yard long, and so on, down the lath, being careful to keep the strings a yard long. This framework was nailed to the orange crates and strings were tied to the yard strings at intervals making window holes for the sides of the greenhouse. Yardsticks and twelve-inch rulers were much in demand during this time. The work was greatly admired by the group. When this committee finished the framework they started to make little window boxes. Other committees made small ladders and bird markers from basswood and painted them. Sweet peas made from green string and parquetry paper "grew" along the wall of the greenhouse.

A large fence with larger posts was erected around the "yard." Paper flowers and painted rocks made the "yard" attractive. The painted rocks were taken home later to be used for doorsteps. In the background a row of hollyhocks and sunflowers cut free-hand added to the beauty of the rear "yard."

All this construction work was the source of conversation and additional activities which would take too much space to record. As an example of these additional activities: bird markers led to a unit about birds; the needs of plants to one about weather, rain, and sunshine; and so on.

The parents had heard a good deal about the greenhouse and the children were anxious for them to come to see it. Invitations were made and carried home by the children. Also, we decided to have a plant sale. Plans went forward rapidly for our plant

sale. Every flowerpot had been painted and a sign saying, "Plants For Sale," and bearing the name of the greenhouse was put up.

About two weeks before the sale we discovered that our beautiful strawberry plant and one or two other plants had a few bugs on them. We were all very much concerned; our plants had been free from insect pests. The children decided that we should telephone the greenhouse to see what could be done. The greenhouse manager advised us to remove the strawberry plant and use a poison on it to kill the bugs. One mother sent a sprayer and after a few treatments the bugs were gone and we were happy again and the sale plans proceeded.

When the parents came to visit the greenhouse the children told their guests about the various committees, sang and dramatized their flower songs, played flower games, and took their parents through the greenhouse and presented each with a daffodil.

The sign "Plants For Sale" was noticed by the mothers and fathers and they were told that the following day was the date of the sale. A large truck made from a low workbench showed that our plants could be delivered to correct addresses. Telephone calls were to be given attention also. Plants sold that day were marked and placed aside since some of the children from the grades were anxious to get plants as gifts for their mothers.

Our gift to each mother was a picture of her child in the greenhouse. The pictures were mounted on glazed paper on which each child had finger painted with any color he chose and made any design which pleased him. A calendar was placed below the picture. From the remarks made by the children, we knew that these pictures were greatly appreciated by the mothers, as were also the little window boxes which by this time had been finished and taken home. Plans were made at home between the children and mothers regarding the planting and care of the boxes during the summer months.

OUTCOMES OF THIS UNIT

1. Reading readiness
 - a. Stories dictated to be lettered on chart
 - b. Learning the names of flowers and birds
 - c. Comparing and matching pictures
 - d. Making riddles
 - e. Words to rhyme with such words as rose, sun, joy, bud, root
 - f. Yes and no questions

2. Manuscript writing
 - a. Name of flower shop
 - b. Sign
 - d. Invitations to parents
3. Numbers
 - a. Differences in coins to buy plants
 - b. Names of coins
 - c. How to make change
 - d. Price of plants
4. Songs
 - a. "Tell Me," "In the Spring," "Pussy Willow" from *In Songland*
 - b. "Pretty Flowers," "We Are Little Flowers," "The Children's Flowers," from *Children's Book of Song and Rhyme*
 - c. Flower and sunshine songs from

APPLES

I like to say the apple-names—

They sound like poetry:

Rambo, Winesap, Golden Sweet,
Flowers of Genesee;
Russet, Pippin, Maidenblush,
Duchess, Astrachan;
Early Harvest, Northern Spy,
King and Jonathan;
Greening, Lady, McIntosh,
Bellflower and Wolfe River,
Rome Beauty—Oh, I guess
The list goes on forever!

I like to say them over—

"Russet" . . . "Golden Sweet" . . .

But better still, I like the apples
In my hand to eat.

—Marion Doyle

THE TREES

Olive trees are gray,
most trees are greener,
oak trees are fat,
most trees are leaner.

Maple trees turn red,
grow brown and bolder,
firs and pines stay green
when the year grows older.

—James Steel Smith

June Norton's *Sing It Again*

d. "His First Bouquet" and "If Among the Garden Flowers" from *Songs of Little Child's Day*. This also served as a little game to help us learn the names of the flowers.

5. Poems

"The Flowers," "The Gardener," "The Rain," "Mistress Mary," "In My Little Garden Bed"

6. Dramatization

a. Seed cycle (tune of "Farmer in the Dell")

b. Sun, wind, rain

c. Hoeing, raking, planting

d. Skipping to the car, riding to the woods, hunting for and picking flowers

7. Vocabulary

Among the new words learned were: bouquet, mixed bouquet, names of various flowers, tall, short, long, narrow, few, many, large, smallest, root, stem, leaves, bud, blossom, earth, fertilizer

8. Art

a. Freehand cutting and drawing of flowers

b. Making large baskets of flowers

c. Moulding flower pots

d. Drawing pictures of greenhouse

9. Nature Study

a. Developed in children an appreciation of the beauty of nature and love of flowers

b. Helped the children appreciate the usefulness of sun and rain and plants' need of them

c. Helped in the formation of habits of observation

d. Experienced handling flowers

e. Observed the ways flowers grow—from seeds, from bulbs, from slips

f. Learned that the same kind of plants grow from the same kind of seeds

g. Learned various parts of a plant—root, stem, leaf, bud, and blossom

h. Birds eat insects and so we protect birds

j. We do not pick some kinds of wild flowers

k. We make our plants grow better by using fertilizer

l. Shapes of the community gardens along the boulevards

m. Workers such as parents, gardeners, florists, and children who help beautify by means of flowers

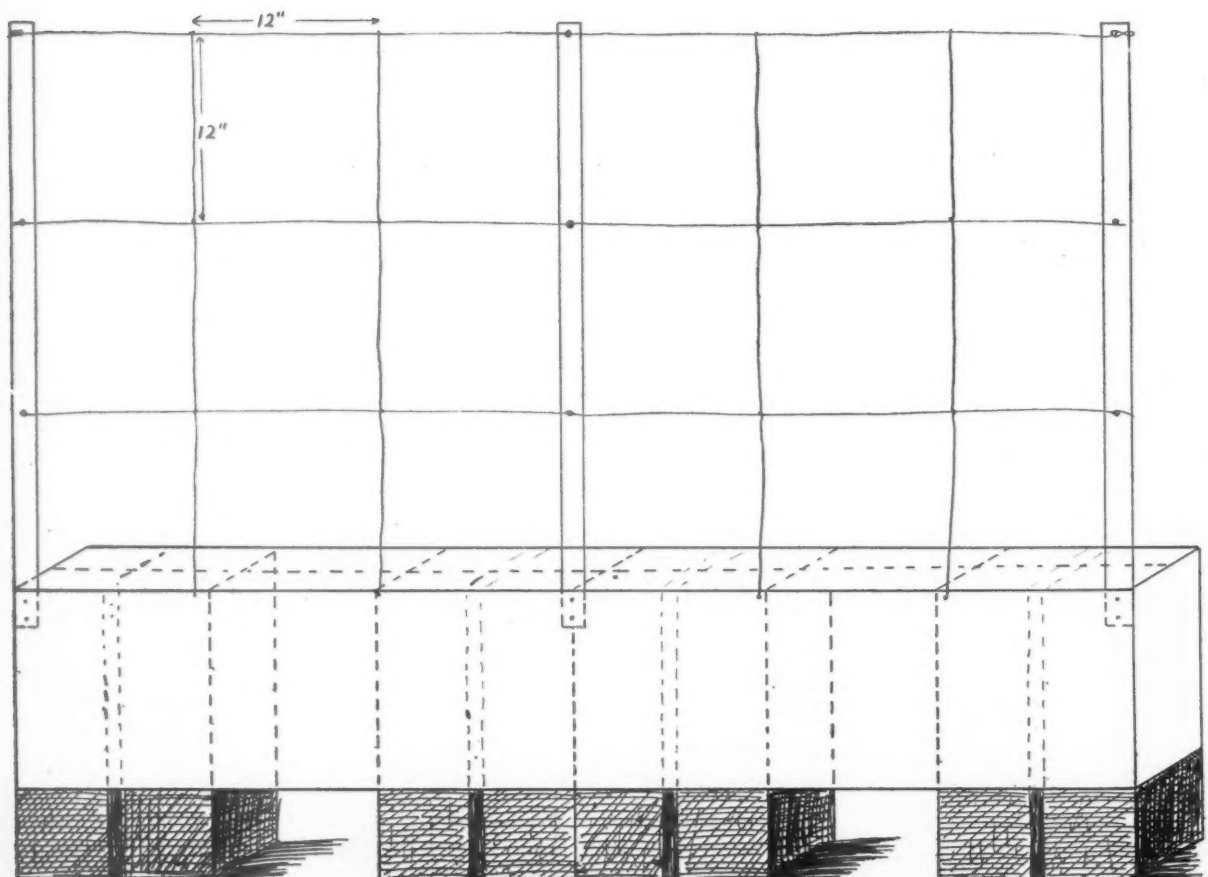
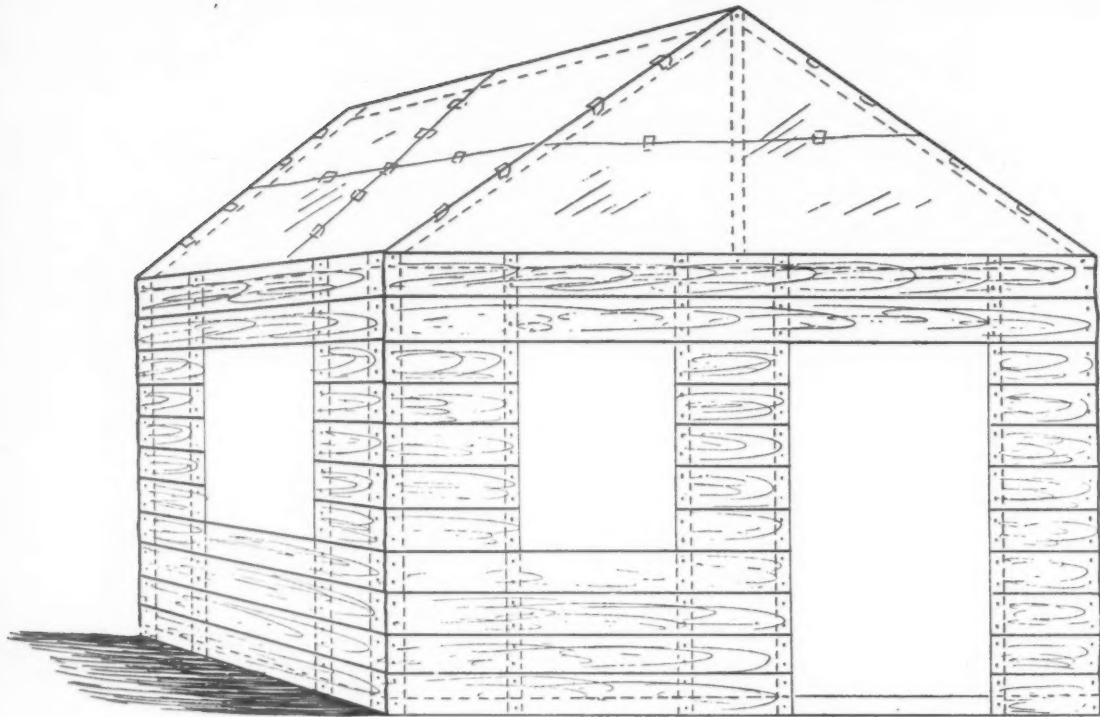
n. How things out of doors look after a shower

o. Some plants need more water than others

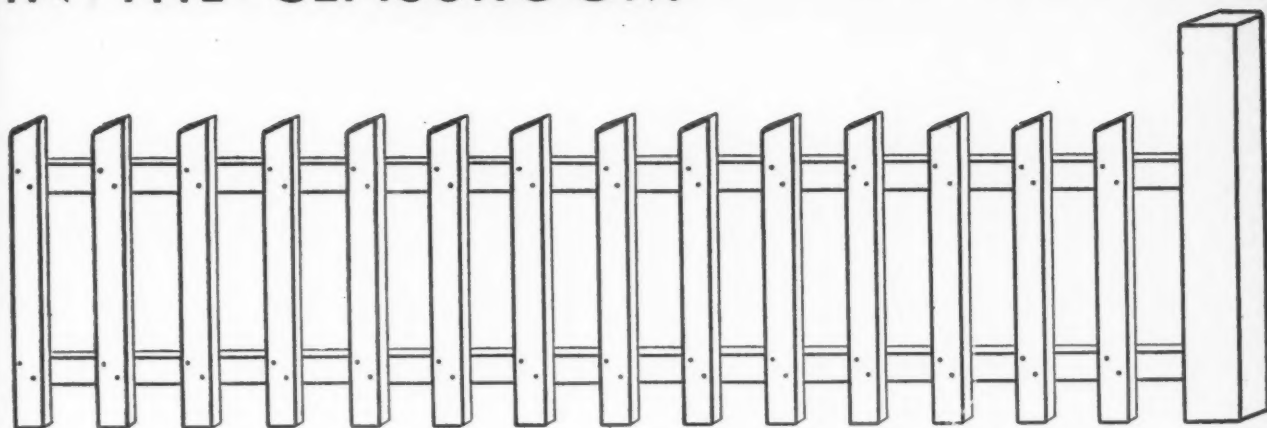
p. Some plants live in water

GREENHOUSE

BUILDING A GREENHOUSE



E IN THE CLASSROOM



In the unit on pages 34 and 35, Miss Doyle has given directions for building a greenhouse in the classroom. She has suggested orange crates, laths, and other materials for the building. They are easiest for small children to manipulate. However, if you plan to use this construction project with an older group and do not have all the items the author has indicated, let the children figure out suitable substitutes. This can well be a project in itself and will give the children experience in critical thinking and the use of proper judgment.

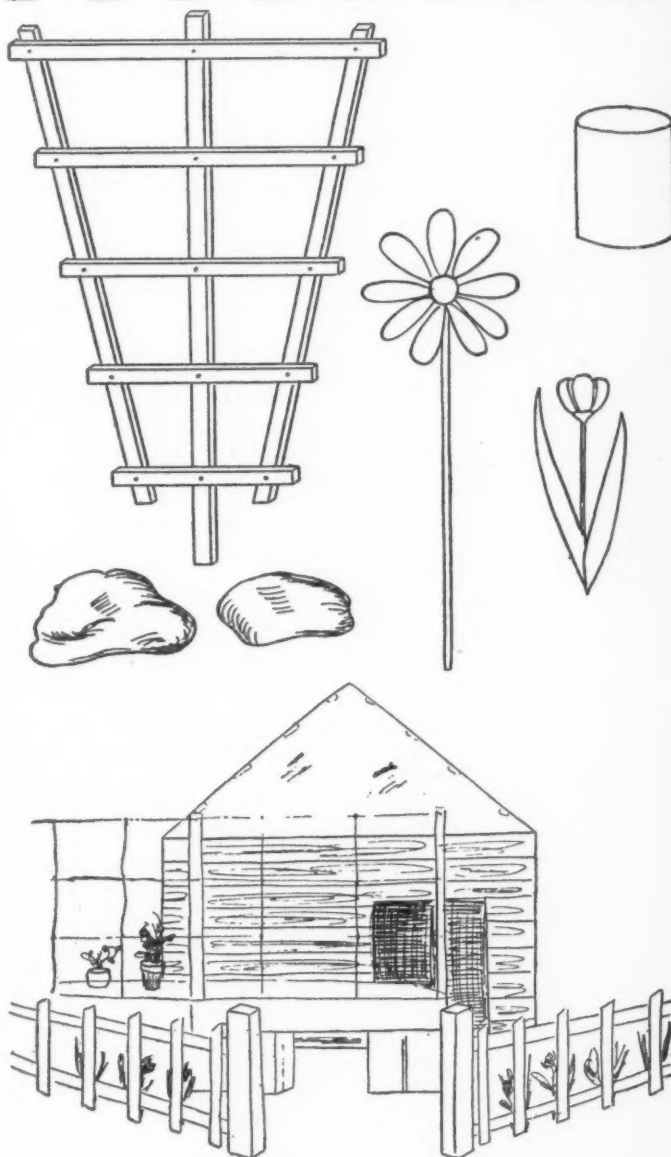
If, for example, your class finds it impossible to obtain sufficient laths to build the fence, you might be able to contrive a fence made from upright posts and rope. It will not have the same effect as a fence made of laths but many children will observe that the post-and-rope fence looks somewhat like iron-pipe fences.

Another suggestion: If your classroom does not have sufficient space for building a greenhouse as shown on the opposite page, try "faking" the fourth wall, putting it against the blackboard, the windows, or a convenient wall space. Then the depth may be adjusted to fit the available space and the width may be enlarged if you desire. Also, if the fourth wall of the greenhouse is a window or windows, the children can have the classroom plants in the greenhouse itself (just as in a real-life building).

If cellophane is not available for the roofing, tissue paper or crepe paper may be substituted. The children will note that many of the windows of a real greenhouse are painted with whitewash to prevent the very hot rays of the sun from harming the plants. The more opaque paper simulates this nicely. It will also give the class another aspect to discuss and in the third grade the children can begin to learn something about the rays of the sun and their helpful and harmful effects.

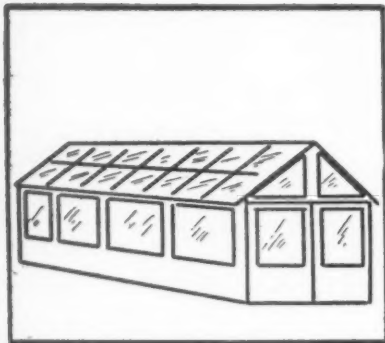
Have you ever considered the construction plans given in *Junior Arts and Activities* as possible stage properties? The greenhouse, for example, is used in classroom dramatic play. If the kindergarten or first-grade room has a platform on which dramatic presentations are given, construct it on that. If you have an older group and you undertake this unit with them, you may not want the greenhouse in the classroom. However, with simplified plans it might be constructed on the school stage and a program written by the children presented as a culmination of the unit. In this case the children might paint a suitable backdrop on sheets of brown wrapping paper or light-colored butcher paper.

There are many ways to build a greenhouse in the classroom!



SEATWORK

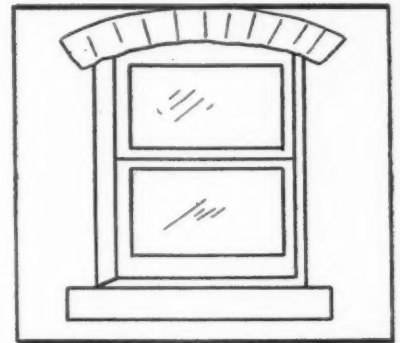
(See page 3 for suggestions
about using this page.)



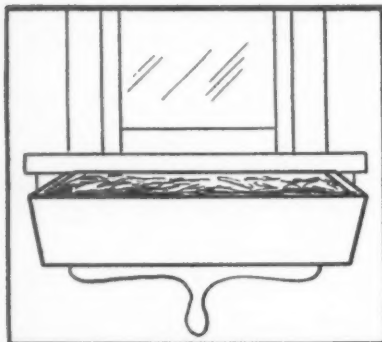
HOUSE FARM
GREENHOUSE



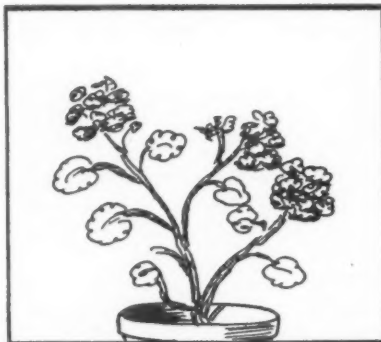
FLOWER HOUSE
FARM



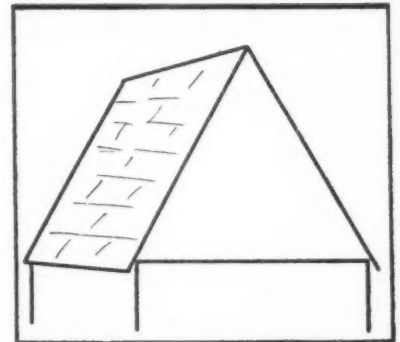
FLOWER WINDOW
BOX



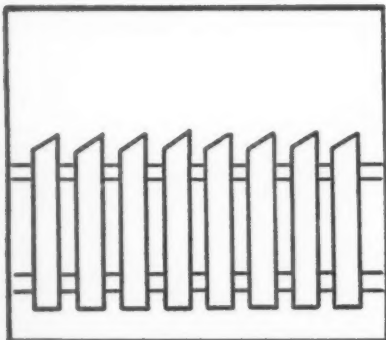
WINDOW-BOX GIRL
FLOWERPOT



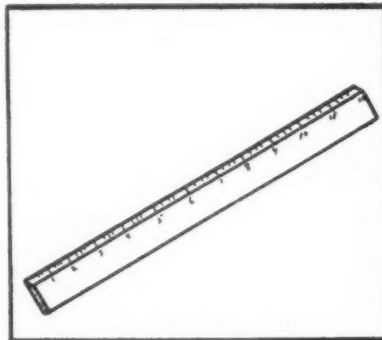
MAN ROOF
PLANT



ROOF WINDOW
GIRL



ROOF FENCE
HOUSE



RIBBON ROOF
RULER



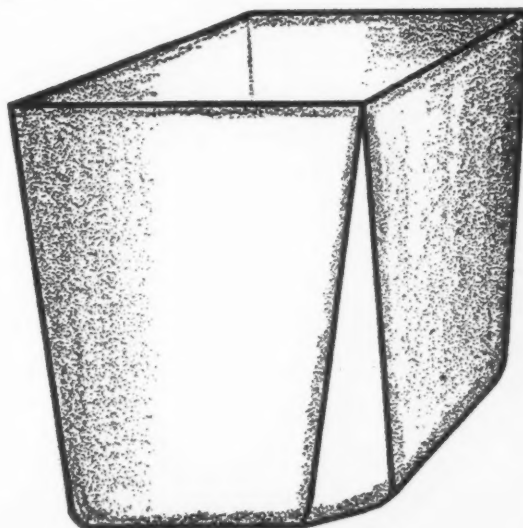
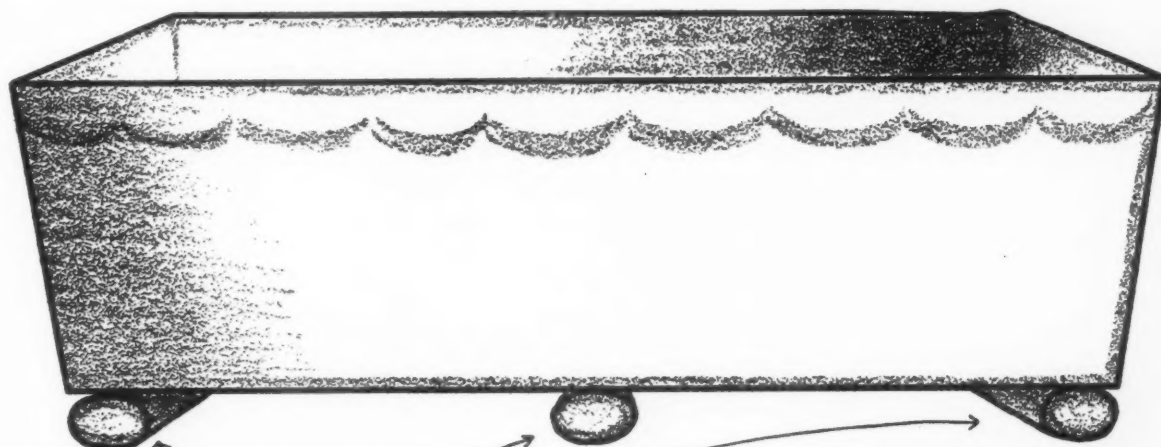
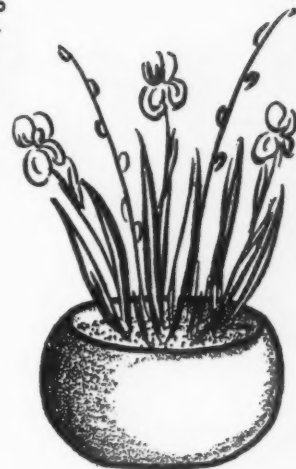
RULER SIGN
GIRL

FLOWERPOTS AND HOLDERS

FROM CLAY



During the unit on the greenhouse, the children will want to make flowerpots. These home-made pots are not recommended for use with real flowers but the children may want to try them with flowers and plants that have been brought into the classroom. However, the flowerpots constructed in the classroom may be painted, filled with sand, and finished with artificial flowers made by the children. These flowers may be cut from construction paper, detailed with crayons, and pasted onto twigs, sticks, wire or other firm materials. The clay flowerpots may be made in several shapes. At the right and left of this paragraph we have shown two of the simplest and more effective. Square and oblong flower containers like those shown below are interesting. The rolls of clay fastened to the bottom as shown add to their attractiveness. Note that these rolls should be flattened somewhat on the bottom so that the container will set firmly.





Soap Bubble Bath

WORDS BY Lillian Beck
MUSIC BY Florence Sidenbender

A soap bub-ble bath in a nice clean tub, A soft, fluffy cloth for a rub, rub, rub, A

big Turk-ish towel when the bath is done, And a tal - cum shower is lots of fun.



Tittle Tattle Tat

WORDS BY Lillian Beck

MUSIC BY Florence Sidenbender

TIT-TLE TAT-TLE TAT I LOST MY KIT-TY CAT. SHE
TIT-TLE TAT-TLE TAT I FOUND MY KIT-TY CAT. I

WENT A-WAY THE OTH-ER DAY, TIT-TLE TAT-TLE TAT.
PRAYED AND SHE CAME BACK TO ME, TIT-TLE TAT-TLE TAT.



AUDIO-VISUAL AIDS

This month we inaugurate a new feature in *Junior Arts and Activities*. Each month these columns will be devoted to a discussion of several audio-visual aids which we believe will help the elementary teacher make her classroom a more lively place, one where all the modern aids to instruction may be put into use. We have had many requests for this kind of service and, as always, we want to include in *Junior Arts and Activities* the type of material which will be most useful to teachers.

We earnestly request your suggestions, comments, and criticisms so that we can make this feature as completely what you want and need as it is possible to have it. Address your comments to the Editor.

One more word by way of explanation: Because we do not want to have any duplication of service, all audio-visual aids which are in the nature of "free and inexpensive materials" will continue to be listed in our department of that name. Look for them there.

Various departments of our federal government have, from time to time, produced teaching films on various subjects. These are usually available free or at a small rental charge. Teachers have had difficulty in making use of this tremendous library because there were so many departments and listings to consult. Now, most of these films have been compiled by one organization and have been catalogued for easy reference.

While many of the films are too advanced for use in the elementary grades, some of those produced by the United States Office of Education certainly come within the scope of the elementary program.

Included in the catalogue are films and filmstrips. The catalogue may be obtained from Castle Films, Inc., 30 Rockefeller Plaza, New York.

Mrs. Gudrun Thorne-Thomsen, one of the outstanding storytellers of our

time, has, under the auspices of the American Library Association's Division of Libraries for Children and Young People, made five double-faced, twelve-inch records containing some of the most famous of all stories for children. "Tales From the Volsunga Saga" are told on two of the records; the others contain the stories of Baldur, Sleeping Beauty, and Gudbrand-on-the-Hillside. This last is a humorous Norwegian folk tale.

While there is at the present time a movement to acquaint children with their heritage of great literature and to help them appreciate it, it is only too true that most of our children are growing up without any knowledge of the famous stories of our civilization. Such records as those of Mrs. Thorne-Thomsen help to overcome the difficulties of presenting stories which at first appear to the children to be far removed from their experience and for which many children have no inherent understanding. She, as any good storyteller, brings the stories to her hearers, makes them live, and makes her audience a part of the story.

These records may be purchased only as a set. The cost is \$10.00. For further information, write to the American Library Association, 520 North Michigan Ave., Chicago 11.

Principals and other school administrators, as well as classroom teachers, will be interested to learn of a new plan inaugurated by Encyclopædia Britannica Films, Inc., whereby their films are now made available on what they term a rent-to-own basis.

The plan is now in operation in the states of Indiana, Illinois, Michigan, Missouri, Wisconsin, Iowa, and Minnesota. It is intended to extend the system to other states in the near future.

If you wish more information about this plan to build up a school or system library of teaching films, write to Encyclopædia Britannica Films, Inc., 20 North Wacker Drive, Chicago 6.

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PANDORA

(Continued from page 22)

not like the others." The voice sounded so sincere and sorrowful that Epimetheus with a weary gesture opened the lid.

Out of the box fluttered a beautiful butterfly. (Pause here for sketching.) "You have committed a great wrong," the butterfly said reprovingly, "But as Epimetheus said, nothing can be done about it now. You let into the world the whole terrible tribe of evil, care, sorrow, disease, and trouble that will henceforth plague mankind."

Pandora began to cry again and Epimetheus hung his head. "Wait," the butterfly said, "you have also released me. I am Hope, and no matter whom ever the evils attack, I shall always come. Hope—mankind shall forever have that."

And that is how it happens that even to this day no matter how mankind is pursued by troubles and sorrow each and every person in the world also has hope.

THE ATMOSPHERE IN WHICH WE LIVE

(Continued from page 16)

and a few others present in very small amounts. They do not seem very important to us but we would miss them very much if they were not there. Carbon dioxide, for example, is one of the gases which we exhale from our lungs. It is used by plants to help them grow. Neon is used in many of the brightly colored lights that we see in modern signs.

Air, because it has weight, exerts a pressure on the surface of the earth and on us. You can imagine, as you walk about, that you are balancing a column of air on top of your head. This column of air is nearly 200 miles high. If it is 1" square it will weigh nearly 15 pounds at sea level. So, for every square inch of your body surface the air is pressing against you with a force of 15 pounds.

Do you think you have discovered an interesting friend in the air? You can't see it but you can feel it and you certainly know it's there. See what other interesting things you can find out from your science books about the air.

You will find it fun to try the simple experiments about the air which we have outlined on page 17.

BUTTERFLIES

(Continued from page 31)

them out, each child using a contrasting color.

The older pupils may crayon dark spots on the wings. If so, make these decorations before the butterflies are added to the long strip of paper. Brass clips through the wings might be used on crepe paper instead of paste.

Greeting Cards. Use the same idea of a cutout butterfly for all three cards. The first is a large butterfly with the greeting printed on the inside pages.

For the middle card, paste a colored butterfly on a sheet of folded white paper. Print the greetings below. Three small butterflies of different colors decorate the third card.

If desired, the butterflies on the cards may also be decorated with darker spots on the wings.

TEACHING COLOR

(Continued from page 18)

During the discussion periods opportunity was given each child to report observations of color harmony in dress, in nature, and in home decoration. The children became very color conscious.

Opportunity for growth in written English was afforded by the fact that the children felt it was necessary to have an explanation of the color harmony used in all the scrapbook pictures if children of other classes were to understand and enjoy them.

The children themselves planned the program for the culmination of the activity. They wrote the speeches and voted on the best ones. They wrote invitations to other classes and to the principal. These were decorated with appropriate designs and colored. They practiced their speeches and learned to give criticism, good and bad, kindly and take it graciously.

The children made a program cover and lettered the contents. The topics chosen were as follows:

Music and Color Harmony Similar
Colors Like People (neighbors)
Tints and Shades and How to Make Them

Showing some pictures and explaining the type of harmony used

Reading of jingles composed by the children about cool colors and warm colors

Showing the picture show "Heidi"

The pupils used the large color wheels on the wall to illustrate their talks.

TEACHER'S CORNER

NEWS AND DISCUSSIONS OF INTEREST TO TEACHERS

We are here to serve the teachers. Help us to help you!

Teachers are invited to send to this department ideas and suggestions that will be helpful and interesting to teachers. One dollar will be paid for each contribution accepted. Send your ideas and suggestions for this page to Teacher's Corner, *Junior Arts and Activities*.

REFERENCE SCRAPBOOK

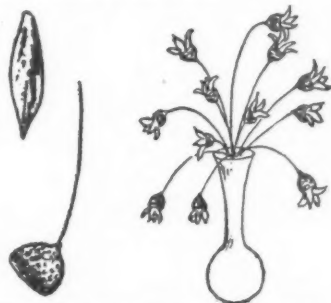
At the beginning of the school year I purchase a large scrapbook. In this book I paste the best copies of work done by the students. This includes: art work, designs, posters, essays, original poems, and the like.

At the end of the year the scrapbook is put on display. The next year I use it as a reference to compare that which was done the year before with what the current group is doing.

—Bertha Schlegel

ACORN CUP BOUQUETS

Acorn cups are excellent foundation material for coat lapel bouquets or for permanent bouquets in wall vases.



Place the acorn cups on wire stems like flower calyxes. Silk-covered balls of cotton, or separate silk petals are then sewed to the wire loop in the cup. These look very gay and flowerlike.

—Mary Neely Capps

THE JUMPING FROG

1. Draw or trace the shape of a little frog onto a piece of thin tissue paper and cut out.

2. Comb the hair briskly and then hold the comb in front of the paper frog. It will jump to the comb.

This is a good illustration of electricity and the fact that we have electricity in our hair.

—Lillian Bassett

MARKET PADS

A market or memo pad is a useful item and it also makes an attractive gift. Fourth-grade children are able to work out this project very nicely.

Using a pattern, draw a teapot on a piece of cardboard—red or some other colored piece is best. Buy small note-paper pads at a ten-cent store. Let the children cut out the colored teapot and then glue the pad onto the center of it. Tie a short pencil to the handle.

Instead of using the teapot idea the children might wish to use designs such as a leaf or flower, a star, an animal, and the like. Older children should draw their own designs instead of using a pattern.

—Ethel Miller

AN AUTUMN FAIRY

To help beginning readers in recognizing individual words, we play a game we call "The Autumn Fairy."

I draw outlines of leaves on the blackboard (using colored chalk) and words or phonetics are written in the leaf outline. A cane or yardstick decorated with crepe paper is used as a wand for the fairy. Bright autumn colors are attractive for the wand decorations.

The child pretends that he is a fairy and dances lightly from one end of the board to the other and touches different leaves with the wand. As he touches a leaf the class calls out, "He, hi, ho, this word says . . ." This is an active drill as well as helping the children with words and phonics.

—Mother St. Raymond, O.S.U.

OPENING THE SCHOOL YEAR

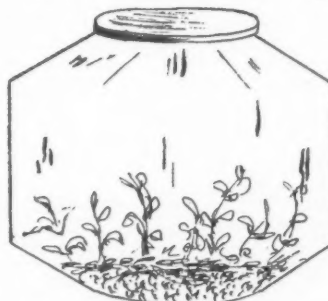
The first day of school is very important. Much of the year's work depends on the first impression made on the student. A neat, attractive classroom helps a great deal. A bouquet of flowers, a few well chosen pictures, an attractive bulletin board, and some interesting books on the reading table all help to hold a child's interest and make him want to go to school.

You might have the children fill in mimeographed sheets with such information as: name, age, mother's and father's names, father's occupation, subject liked best, hobbies, what kind of books the child likes to read, any special musical or artistic interests and abilities, and so on. With this information the teacher will be more able to understand the individual child and the preferences of the group as a whole.

—Dorothy Overheul

LANDSCAPE GARDEN

Early in the fall we made a landscape garden for our classroom. We used a large glass jar of a rather odd shape. First we



put a little sand in the bottom of the jar and covered that with green- and silver-colored moss. Next we put pebbles on the moss then sprigs of evergreen, red berries, and very small green plants.

We kept the garden moist, not wet, and the plants grew very nicely. The children were very much interested in this miniature garden and they enjoyed bringing in tiny plants for it as well as pebbles and berries. Also, they helped work out the artistic arrangement of the garden.

—Grace Close

HOUSE BOOK

During our "Better Homes" project we made what we called "House Books." Some of these books were made in the shapes of houses and some had pictures of beautiful houses pasted or sketched on the covers.

One page of the book was devoted to the living room, one to the kitchen, one to the bedroom, and so on. On the last page of the book were pictures of the family.

The children enjoyed making these books and it did a great deal to stimulate their in-



terest in caring for and making home an attractive place.

—E. Lucile Knox

SEPTEMBER CALENDAR

Dates which are illustrated on the September calendar (page 6) are not by any means all of the anniversaries of events which might be observed.

Many schools do not open before Labor Day, nevertheless, some explanation and discussion of this holiday should take place.

General Pershing's birthday, September 13, can promote discussion of his contributions to our democracy and comparisons of the aftereffects of World War I with those of World War II.

Constitution Day can very well be integrated in a study of the United Nations by comparisons of our constitution and the United Nations Charter: even though they were written over 100 years apart, what goals and aims have they in common? Also, a Constitution Day study is a good introduction to history and social studies.

The first day of autumn, September 23, might stimulate interest in art projects based on this season, or in literature (poetry, songs, stories) pertaining to it. It also correlates nicely with nature study and science units as they pertain to seasonal and weather changes.

Balboa's discovery of the Pacific correlates nicely with additional studies, after the Columbus unit.

Other special days which you may want to mention are: September 2, Eugene Field's birthday; September 5, first Continental Congress assembled in Philadelphia in 1774; September 7, Brazilian Independence Day; September 16, anniversary of Mexican independence.

YOUR BOOKSHELF

Are you looking for picture books for your kindergarten library? Do you want new books to read to the "littlest" children? This year, as always, there are a number of new picture books, some good and some not so good. One which we should like to editorialize over is *Johnny Cottontail* written by Margaret Friskey and illustrated by Lucia Patton, but first here is a report. Johnny Cottontail lives alone. He has no work to do and no one to love. Into his life come four motherless bunnies. He teaches them to hear danger and to smell danger and, until one of them rebels, to keep away from the farmer's garden and the carrot tops all rabbits are fond of. The farmer's dog guards the garden and he is no friend to Johnny Cottontail—at least not in the beginning of the story. What happens when Pete rebels—he is the most apt of the four bunnies and has already dug a hole in the roof of Johnny's house—is amusing and unexpected. About two-thirds of each page is devoted to a large illustration which is an integral part of the story. As a matter of fact, the story sometimes follows the pictures so closely that it is necessary to look at the pictures before continuing the text. The pictures are drawn with winsome humor for which the artist is well known. There are bits of pink color scattered through the black-and-white illustrations for added interest.

We imagine that the artist will not receive any reward for her drawings but we can almost hear the children's chuckles as they study each picture.

The theme of the story is not new. Nor is the situation unusual. Even the name Johnny Cottontail has been used before. Yet the whole—the story and the illustrations—is distinctive and appealing. After all, to paraphrase an old statement, the children are different; it is the storyteller and adult who remember previous treatments.

(David McKay Co., 604 S. Washington Square, Philadelphia 6—\$1.00)

Harriett is a book but *Harriett* is also a horse, a most unusual but then not-so-unusual horse. *Harriett* once lived in London not very far from the British Museum. She was friendly, in a most ladylike manner, with the Lions, Henry and Harold, who guard its entrance. As a matter of fact, except for one Midsummer's Eve, *Harriett* maintained dignified relationships with a good many animals and people. The Midsummer's Eve party came after she had retired to a farm in Surrey with Mr. Edward, *Esquire*, and it was her birthday, so she can hardly be blamed. *Harriett* always had noticed the hats in a particular window of Sedgerow, Ltd., whose delivery cart she pulled and it was a hat which brought her happiest day to a happy conclusion.

Charles McKinley, Jr., the author of *Harriett*, has produced a feeling in his book, a feeling of whimsy, grace, and illusive once-upon-a-time fantasy without ever being coy. That is a considerable achievement. William Pene du Bois, the illustrator, has caught the spirit of the story and infused his drawings with humor.

We should place this book in the grades-three-to-six level but a great deal of the success of the story with children depends upon their feeling for this type of writing or their experience with the places and manners of England where the story takes place.

(The Viking Press, 18 E. 48th St., New York 17—\$2.00)

One World of Fashion by M. D. C. Crawford is a series of 60 plates on heavy paper (12" x 18") each containing illustrations and descriptions of the costume arts of the world beginning with ancient civilizations and ending with modern times. The primitive costume arts of the Pacific islands, Indians, Eskimos, head hunters of the Philippine Islands as well as the sophisticated styles of European civilizations are illustrated.

This is a really valuable collection for a school library or an art department. Its uses are many: details of costumes for social-studies units, ideas for adapting costume styles from those of other countries, design problems,

and so on. If there is one fault to find with the collection (and it is a relatively minor fault), it is that many of the plates appear to emphasize the costume adaptations as they would have been in the United States in the twenties. The reason for this is simple: many of the plates were made during the twenties because many of them appeared during the twenties in one of the leading trade journals of the designing and dress-making industry.

(Fairchild Publishing Co., 8 E. 13th St., New York 3—\$10.00)

The story of how Pocahontas saved the life of John Smith is one of the favorite legends of America. Based on some facts and much speculation, the story has appealed to children everywhere. It has been rewritten by Mabel Cobb and Claude Allen Lewis and published in a book called *The Story of Pocahontas*. In general it is a straightforward account written on a level which includes, we believe, grades three to five. The chief feature of the book is a picture printed on the inside back cover which when pulled with a tab attached to it reveals another, different picture. Both are scenes from the life of Pocahontas.

(American Crayon Co., Sandusky, Ohio, 79c)

Teachers in the intermediate and upper grades will be glad to know about two additions to the "America at Work" series by Josephine Perry, whose other volumes are so useful in the social studies. The latest two are *The Petroleum Industry* and *The Paper Industry*. An innovation in *The Paper Industry* is the illustration on the end papers which, instead of being a photographic reproduction of some characteristic scene, is a diagram of a digester and blow pit essential to the manufacture of paper pulp.

As is her usual method, Miss Perry tells something of the history of the industry under discussion, the manufacturing processes, and the uses of the products. She also includes research and testing in these volumes.

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ENTERTAINMENT HELPS

By GLADYS JACKSON

The purpose of this column is to give the busy teacher quick, easy plans for the monthly P.T.A. or Community Club meeting and suggestions for a big program.

If a teacher would like special help for her big program she may write to the author in care of Junior Arts and Activities stating when she intends to have her program, the type she wants, and the number and age of her pupils. Such requests should be sent at least a month and a half prior to the program date.

In the listings of sources of material, the price and the name and address of the publisher are always given. Send orders for this material direct to the publishers.

SETTING: Arrange chairs around stage in semicircle. Small artificial bonfire in back center. Back scenery—hang bright Indian blankets, or brown wrapping paper colored with colored chalk or poster paint to represent a western view. Cactus can be made of stiff cardboard, painted with poster paint, and stood up on Christmas tree stands.

COSTUMES: Regular cowboy or cowgirl outfits. Girls wear skirts, blouses, and bandana kerchiefs. Bolero jackets and boots are easily made from plain-colored oilcloth. (Black is best or, if the reverse side is used, the embroidery can be simulated with bright enamels.) Boys wear shirts, overalls, big hats, and bandana kerchiefs. (Chaps can be made of sturdy brown paper or old oilcloth with the underside out and made fancy by painting with enamel or sewing on corn silk.

DIALOGUE: Use negro minstrel as base, work in farm or cowboy jokes. The following are suggestions for the special numbers. The "ranch owner" (interlocutor) introduces them through the dialogue.

Introductory Song—"The Cowboy" by the group.

Recitation—"The Cowboy" by a very small boy or "The Limitations of Youth" (Eugene Field) by an intermediate- or upper-grade boy, or "Sven Svenson, Svede Farmer" (10 minutes) by a boy or girl good at giving long readings.

Song—(Humorous, act it out) "Great Grand Dad" or "Goin' Down to Town."

Playlet—"Hicks from the Sticks" (15 minutes) by two large boys.

Song—"Wait for the Wagon" by the group.

Pantomime—"In the Good Old Nick of Time" (mortgage due on old homestead) by 6 or more pupils, or "Prairie Romance" (satire on western movie) by 6 or 8 pupils.

Song—"Sourwood Mountains" by the group.

Square Dance

Recitation—"The Moo-Cow-Moo" by a very small boy or "Pillar Fights" by an intermediate- or upper-grade boy.

Song—"Home on the Range"

Other songs, recitations, and plays can easily be substituted.

Buckaroo Ballads (Paull-Pioneer Music Corp., 1657 Broadway, New York City, 35c) contains all songs suggested except one of the humorous songs.

The Cowboy Sings (Paull-Pioneer Music Corp., 35c) contains all the songs suggested (excepting one of the humorous songs), and many other old and new westerns.

Songs of the Hills and Plains by Harry Robert Wilson (Hall & McCreary Co., 434 S. Wabash Ave., Chicago, Ill., 60c) is a fine collection of mountain, cowboy, negro, pioneer, play-party, children's songs and dramatizations.

Sing! by Stevens and Dykema (C. C. Birchard & Co., Boston, Mass., 25c) contains four good cowboy songs and is one of the best all-purpose song books. It contains classical and ragtime favorites for home, school, and community.

"Cit on Board" Folk Songs for Group Singing by Beatrice Landeck (Edward B. Marks Music Corp., R.C.A. Bldg., Radio City, New York, \$1.00) is a collection of folk songs arranged for mixed chorus. 2 cowboy songs, 2 square dance tunes.

The Cowboy, K. Clark (Wetmore Declamation Bureau, 1631 S. Paxton St., Sioux City 20, Iowa, 15c) 20 lines.

Sven Svenson, Svede Farmer (T. S. Denison & Co., Chicago, 30c)

Hicks from the Sticks (T. S. Denison & Co., 30c)

In the Good Old Nick of Time and Prairie Romance (Wetmore Declamation Bureau, 35c each)

All-American Square Dances by "Allemande" Al Muller (Paull-Pioneer

Music Corp., 50c) is the best book on real square dancing. Everything is given—musics, calls, diagrams, terms, and complete directions.

Sing and Dance by Hunt and Wilson (Hall and McCreary, \$1.25) contains folk songs and dances and American play-party games. Full directions are given. These are similar to square dances but not as difficult.

"The Moo-Cow-Moo" and "Pillar Fights" are in *Humor Up-to-Date* by Geneva Vernon (March Brothers Publishing Co., 208-212 Wright Ave., Lebanon, Ohio, 60c) which includes other good recitations.

Cowboys and Indians by Pirani and Wheeler (Educational Music Bureau Inc., 30 E. Adams St., Chicago, Ill., 75c purchase of six copies is required) is an operetta based on the story of Grey Eagle and the Palefaces. 45 minutes. 13 parts with 6 boy solos and 1 girl solo plus chorus. Suitable for mixed grades, intermediate or upper.

HALLOWEEN

Good Things for Halloween (T. S. Denison & Co., 50c) good general book.

Halloween Fun Book (Beckley-Cardy Co., 1632 Indiana Ave., Chicago, 40c) very good.

The Best Halloween Book (J. S. Latta & Son, Cedar Falls, Iowa, 40c) excellent.

And the Ghost Walked (Wetmore, 35c) pantomime, 11 characters.

Who's Afraid of the Big Bad Ghost (Wetmore, 35c) short play for intermediates.

Who's Afraid (Wetmore, 30c) operetta, 17-50 characters, songs are to familiar tunes.

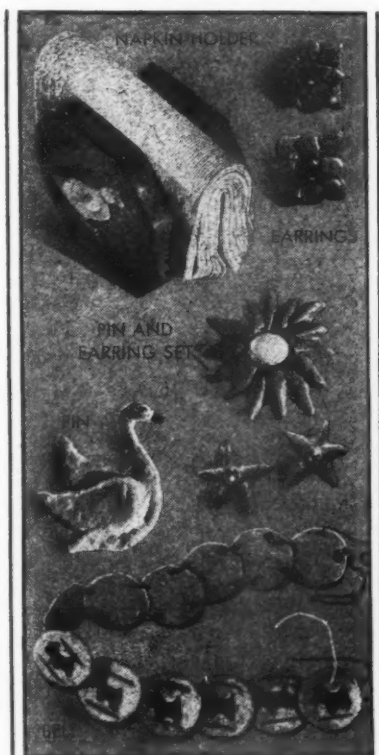
For contest declamations write to Wetmore Declamation Bureau or to Edna Means Dramatic Service, 525 S. Arlington Place, Chicago, for their catalogs.

Special music teachers write to these companies for their catalogues: Clayton F. Summy Co., 235 S. Wabash Ave., Chicago; Educational Music Bureau Inc., C. C. Birchard & Co., and Hall and McCreary Co. (See elsewhere on this page for the addresses of these companies.)

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Portfolio for Primary Teachers is an excellent series of 12 leaflets designed to give help with some of the problems facing the primary teacher. It includes such subjects as: "What to Expect of Six-to-Eights," "Starting First Grade Reading," "When Children Work Alone," "Developing World Citizens," "The Meaning of Discipline," and several others. The information should prove valuable to the teacher who is just beginning her work as well as the experienced teacher.

This portfolio is available from The Association For Childhood Education, 1201 Sixteenth Street, N.W., Washington 6, D.C. The price is 50c.

A brochure of important interest *Teaching About the United Nations Charter* has been published by the National Education Association of the U.S. and is available from them at 1201 Sixteenth Street, N.W., Washington 6, D. C. at 10c per copy.

A clear explanation of the charter which was drawn up at San Francisco is given along with explanations of the general assembly, the security council, the economic and social council, and so on.

As the forward makes clear, "These teaching suggestions are not designed as a blueprint for uncritical adoption, but as material that will assist in whatever method and approach is adopted in any classroom, school, or school system."

The music, words and historical and biographical sketches of the authors are given in the Morgan-Dillon publication

(Continued on inside back cover)

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Dr. Maurice R. Davie, Chairman of the Yale Department of Sociology and Director of the Study of Recent Immigration from Europe, is well qualified to write on this important subject, and his stand is soundly based on irrefutable facts and figures.

Questions about the forests, their history, current conditions, management of our forests, and interesting miscellaneous data about trees and lumbering are proposed and answered in *Paul Bunyan's Quiz* published by the Ameri-

can Forest Products Industries, Inc., 1319 Eighteenth Street, N.W., Washington 6, D.C.

There is no charge for this excellent booklet and teachers should find it of tremendous value in connection with the study of forests and trees and lumbering as well as conservation. The illustrations will provide much added interest for both students and teachers.

Simple, practical suggestions *For the Storyteller* are contained in this publication of the National Recreation Association, 315 Fourth Avenue, New York 10.

This manual also contains an excellent bibliography of various types of stories and poems for children, including: collections, seasonal, humorous, adventure, and the like.

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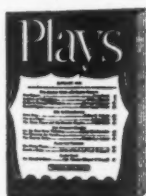
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